A Pilot Professional Development Program for Occupational Therapy Practitioners Who Work in Home Settings: Knowledge Translation on Urinary Incontinence

Jaimee Betts Hegge
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A Pilot Professional Development Program for Occupational Therapy Practitioners Who Work in Home Settings: Knowledge Translation on Urinary Incontinence

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A doctoral project submitted in partial fulfillment of the requirements for

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Abstract

This purpose of this project was to increase the knowledge and confidence of home based occupational therapy practitioners working with adults and older adults who have urinary incontinence. The knowledge translation model of education is used to educate health care providers to improve integration of new information. The Reflective Questioning Framework for coaching can be effective with increasing knowledge and confidence of practitioners that are integrating new learning into their daily home care practice. This project investigated how these two approaches to education impacted occupational therapy practitioners perceived level of knowledge and confidence treating urinary incontinence in adult and older adult clients in the home setting using a self-assessment survey. Overall the participants report an increase in knowledge and confidence and reports competent and mastery level skills after the educational program and coaching session. The groups that participated in the coaching sessions reported a greater increase in knowledge and confidence. Further development of the role of occupational therapy in the management of urinary incontinence is required.

*Keywords:* urinary incontinence, knowledge translation, coaching
Chapter 1 Introduction

Background

Urinary incontinence (UI) is an issue that occupational therapy practitioners commonly see when working with adults and older adults in the home setting. Occupational therapy practitioners may benefit by specialized training to increase knowledge and confidence in addressing UI in their practice. This project provided occupational therapy practitioners with a one hour educational program and offered coaching sessions to further reflect on improving confidence with addressing UI.

Need

UI impacts the health and psychosocial well-being of adults and is a major issue in home health services. UI affects approximately 40% of the adult population receiving home health services and management of this issue costs an estimated $14.2 billion per year in the United States (Gorina et al., 2014). UI contributes to social isolation, low self-esteem, poor self-concept on their health outlook, depression, and anxiety (Aguilar-Navarro et al., 2012; Fultz & Herzog, 2001; Mitteness, 1987; Sims, Browning, Lundgren-Lindquist, & Kendig, 2011; Sinclair & Ramsay, 2011). Disrupted sleep patterns and immobility may also result from UI (Didino, Prolova, Taran & Gorodetski, 2016; Dugan et al., 1998; Meyer, Janke, & Beaujean, 2014). UI may impact individuals’ occupational engagement and participation (Neumann, Tries & Plummer, 2009).

With the high prevalence of UI, occupational therapy practitioners working with adults and older adults need to be knowledgeable and confident addressing this issue. Occupational therapy practitioners working at Masonicare, a healthcare organization in Wallingford, Connecticut, state they lack knowledge and confidence working with clients who experience UI.
Significance and Innovation

This project will contribute to occupational therapy by providing a guideline for educating occupational therapy staff on assessment methods, evidence-based interventions, and client education topics that address a variety of deficits for adults and older adults with UI. The education was provided in a one hour program and additional one-on-one coaching sessions with a small number of participants. Both methods were evaluated with a self-assessment tool. The results of these methods may be used to design future educational programs at home care agencies. This project may benefit individuals with UI as well as the occupational therapy practitioners that are working with adults and older adults.

This project may have a significant positive impact on the field as it: 1) focuses on a prevalent and expensive health issue affecting adults and older adults; 2) addresses a knowledge gap in home care occupational therapy practitioners; 3) provides evidenced-based treatment guidelines for occupational therapy practitioners; and 4) has potential to be replicable and disseminated within healthcare organizations. The education program utilized a knowledge translation approach that is suggested for health care providers. This approach may be effective in producing change in the daily practice of healthcare providers due its emphasis on interaction, and hands on application of skills (Davis, 2003). Coaching sessions modeled from the Reflective Questioning Framework were utilized to assist occupational therapy practitioners with deeper reflection and application of the new learning they received (Rush, Shelden & Raab, 2008).

Purpose

The purpose of this project was to increase the knowledge and confidence of occupational therapy practitioners when treating adults and older adults with UI in the home setting. The educational program outlined the impact UI has on occupational performance and
the interventions occupational therapy practitioners can use with their clients to facilitate independence and manage UI. The expected outcome increases the occupational therapy practitioners’ competencies to treat incontinence in the home setting.
Chapter 2 Literature Review

Urinary Incontinence in Adults Receiving Home Health Services

Urinary incontinence (UI) is a common medical condition that is evident in adult populations receiving home health services. The Continence Foundation of Australia (2018) defines incontinence as “any accidental or involuntary loss of urine from the bladder” and this can be a few drops to large amounts of urine loss. The common forms of incontinence are urge, stress, mixed, overflow, and functional incontinence. Urge incontinence is defined as a sudden need to urinate (“Urge incontinence”, 2018). Stress incontinence is when urine leaks out of the bladder with an increase in abdominal pressure (“Stress incontinence”, 2018). Mixed incontinence is a combination of urge and stress incontinence (Moulin et al., 2009). Functional incontinence is not using the toilet due to an unwillingness to go to the bathroom, environmental factors or cognitive issues (“Functional Incontinence”, 2018). Overflow incontinence is defined as the overfilling of the bladder combined with the inability to empty the bladder normally (Nasr & Ouslander, 1998). UI is not considered a normal part of aging, therefore, health professionals can reduce or eliminate these symptoms (Chang, Lynm & Glass, 2010). UI affects approximately 40% of the adult population receiving home health services and management of this condition costs an estimated $14.2 billion per year in the United States (Gorina et al., 2014).

Older individuals with UI report greater disruption to their participation in activities of daily activities than younger women (Kwak, Kwon & Kim, 2016). With the increasing older adult population, there will a larger number of individuals that require treatment for UI. UI impacts all areas of occupation, including activities of daily living (ADL), instrumental activities of daily living (IADL), work participation, rest and sleep, leisure tasks, and social participation (AOTA, 2014). Disrupted sleep patterns and immobility that can result from urinary
PROFESSIONAL DEVELOPMENT PROGRAM FOR URINARY INCONTINENCE

incontinence impacts overall self health outlook (Didino, Prolova, Taran & Gorodetski, 2016; Dugan et al., 1998; Meyer, Janke, & Beaujean, 2014). Evidence suggests that UI results in embarrassment and lack of concentration at work, more communication using technology, decrease attendance at religious services, less engagement in homemaking tasks and leisure tasks (Fultz, Fisher, & Jenkins, 2004; Higa & de Moraes Lopes, 2007; Sims, Browning, Lundgren-Lindquist, & Kendig, 2011).

The psychosocial impact of UI can be equally as challenging as the neuromuscular and occupational performance aspects of incontinence. UI can degrade the motivation for life, well-being, and an individual’s subjective health status (Kwak et al., 2016). Social isolation is a prevalent problem with the older adult population and UI increases the occurrence of isolation. Women report experiencing more social isolation due to UI than fecal incontinence (Yip et al, 2013). Social isolation is common with UI disorders due to the stigmas surrounding bathroom behaviors, including multiple trips to the bathroom and feeling unclean (Elstad, Taubenberger, Botelho, & Tennstedt, 2010). Clients report the stigma of UI implies an individual cannot control their body and increases speculation of the root causes of the UI (Sims et al., 2011). Other impacts of UI are low self-esteem, poor self-concept on their health outlook, depression, and anxiety (Aguilar-Navarro et al., 2012; Fultz & Herzog, 2001; Mitteness, 1987; Sims et al., 2011; Sinclair & Ramsay, 2011).

There is a need to improve screening and interventions for UI in healthcare, particularly in home health. The majority of adults on home care services that live with UI do not have a formal diagnosis of incontinence and individuals with a formal diagnosis are typically offered more intervention than individuals without a diagnosis (Moulin et al., 2009). Moulin et al. (2009) states that clients with drops of urine leakage received less intervention that adults with heavy
urine leakage. Complete continence may not be a realistic goal for all patients, but improved quality of life can be addressed through a variety of interventions (Engberg & Li, 2017). Moulin et al. (2009) reports less than 10% of patients receiving care in a home health agency were educated on pelvic floor exercises and only offered a variety of absorbing pads. The literature presents interventions that lack the knowledge and expertise of occupational therapy practitioners.

A focus group of older adults explored personal experiences with discussing incontinence. Most participants state their physicians did not ask about bladder control issues and they were too embarrassed to start the conversation (Palmer & Neuman, 2006). There appears to be gender discrepancies in comfort level when discussing incontinence. Men expressed embarrassment discussing bladder control issues with women, while women stated they spoke comfortably with their female friends and family about their incontinence (Palmer & Newman, 2006). Identifying the specific barriers to engagement in meaningful activities can help identify incontinence issues with older adults during the evaluation process.

**Occupational Therapy Role in UI Management**

Occupational therapy practitioners provide a focus on occupational engagement and eliminating barriers to occupational participation. UI can impact adult and older adults’ ability to complete their meaning occupations. Occupational therapy practitioners have an important role in helping clients manage UI as they understand the occupations impacted by incontinence as well as the personal and environmental factors that influence incontinence. The Person-Environment-Occupation-Performance (PEOP) model is used in occupational therapy practice to identify the occupational, environmental and personal factors that limit occupational participation (Bass, Baum & Christansen, 2015). The personal and environmental factors include
but are not limited to self-concept, cognition, sensory, social factors, physiological factors, cultural factors, and physiological factors (Bass, Baum, & Christiansen, 2017). Occupational and performance considerations are participation, well-being, and doing occupations (Bass et al., 2017). The PEOP model considers all the areas of an individual that can be impacted by UI.

Occupational therapy assessment for UI is best initiated with questionnaire style assessment tools. The following tools are commonly used to gather information about the type of UI and the severity of symptoms: such as the Incontinence Impact Questionnaire (IIQ), the Urogenitary Distress Inventory (UDI), the Michigan Incontinence Symptoms Index (M-ISI), the International Consultation on Incontinence Modular Questionnaire (ICIQ), and the Kings Health Questionnaire (Abrams, Avery, Gardener, & Donovan, 2006; Kaya, Akbayrak, Toprak Celenay, Dolgun, Ekici, & Beksac, 2015; Skorupska, Miotla, Skorupski, Rechberger, & Kubik-Komar, 2017; Suskind et al., 2014). During the initial interview, occupational therapists create an occupational profile summarizing the client’s perspective, priorities, and desired outcomes (AOTA, 2014). The occupational profile is the guide for writing goals and the plan for treatment. A comprehensive UI assessment should include identifying comorbid conditions, identify the individual’s preference of treatments and goals, targeted UI history including symptoms, type and severity of incontinence, toileting ability, fluid intake, and impact of incontinence on personal and social life (Engberg & Li, 2015).

Occupational therapy treatment plans utilizing the PEOP model are outlined using personal, environmental, and occupational interventions. Interventions address the person can be pelvic floor muscle retraining, electrical modalities, and dietary recommendations. Environmental interventions can include environmental modifications, equipment recommendations, and caregiver education. Interventions addressing occupational factors are
lifestyle and behavior modifications, such as scheduled voiding, urge suppression techniques, and prompted voiding (Enberg & Li, 2017).

Treatment outcomes are identified by the client during the assessment process. The occupational therapist role is identifying how to best measure the outcomes. Outcomes can be measured by improved occupational performance, reports of improved quality of life, and greater life satisfaction using a questionnaire style assessment tool.

Quality of life can be improved through non-surgical interventions (Engberg & Li, 2017). Enhancing an individual’s quality of life is the aim of occupational therapy practitioners. This can be achieved by addressing the personal, environmental, and occupational factors of the individual that are impacted by UI.

**Professional Development Related to UI**

Professional development is needed in occupational therapy to prepare practitioners to effectively address UI in home health services. UI is not a specific accreditation standard in occupational therapy education and this creates a variability in the level of preparedness (ACOTE, 2011). Continued education is required to adequately prepare occupational therapy practitioners to address UI.

Knowledge translation is a model of education that encourages interaction between the participants. This model “is defined as the exchange, synthesis and ethically sound application of knowledge…to accelerate the capture of the benefits of research…through improved health, more effective services and products, and a strengthened health care system” (Davis et al., 2003, p.34). Knowledge translation emphasizes the progress from awareness of current level of knowledge and skills, agreement with new information, adoption of new skills, to adherence with evidence based practice (Davis et al., 2003). Passive educational activities are less likely to
change behavior and the most effective strategies are active and aimed at overcoming barriers to change (Davis et al., 2003). Small group sessions with clinicians, opportunities for feedback, reviewing patient education methods, and distribution of printed information can be effective methods for using knowledge translation with healthcare provider education (Davis et al., 2003). By utilizing the knowledge translation constructs of organizing learning principles, emphasizing team learning, and targeting the topic with evidence, the educational program in this project can achieve the specific aims for improving therapist confidence and knowledge treating UI (Davis et al., 2003). The knowledge translation model of education is a more effective way to produce a change in the daily practice of healthcare providers due to the emphasis on interaction, and hands on application of skills (Davis et al., 2003).

The Framework for Reflective Questioning is utilized in early intervention settings to improve clinicians’ evaluation and treatment skills by increasing awareness, identifying alternative solutions, analyzing outcomes, and actively using new strategies (Rush, Shelden & Raab, 2008). Confidence will increase through the reduction of stress and comfortability with asking questions to learn (Schwellnus & Carrahan, 2014). This framework facilitates depth of understanding and awareness of strengths and weaknesses with clinicians own practice (Rush et al., 2008).

In the healthcare field, coaching is often used as a follow up to a training workshop to encourage implementation of new education (Schwellnus & Carnahan, 2014). Successful aspects of coaching are voluntary participation, mutually beneficial, and not used to evaluate a participant. Schwellnus & Carnahan (2014) report greater implementation of inservice information when the coaching model was used and all participants enjoy the process. Early intervention occupational therapy practitioners use coaching strategies to improve performance
as well as assisting parents with children who have disabilities (Novak, 2014). A coaching relationship can be initiated by a request for assistance, wanting to learn a new skill, or seeking new challenges (Rush, Shelden, & Hanft, 2003). The process for coaching begins with initiation, then observation, action, reflection, evaluation, and continuation or resolution (Rush et al., 2003).

A variety of other strategies have been identified for professional development programs that promote practice change. Grol & Grimshaw (2003) suggests that only certain types of evidence can easily be implemented into practice. Successful implementation factors include quality of evidence supporting a recommendation, compatibility of recommendation with existing standards, decrease complexity with decision making, concrete description of the desired performance or practice, and fewer new skills and organizational change to follow the recommendations. When educating a group of adult health professionals environment and context should be considered. Small-group learning can enable some participants to feel more open during discussions when they are usually limited by risk taking and greater exposure (Steinberg & Vinjamuri, 2014). Safe and supportive environments that create a dialogue between learners in an environment promoting equality are best for adult learners (Falasca, 2011).

Reflective questioning and coaching was appropriate to utilize in the coaching sessions with occupational therapy practitioners in this project due to independent nature of the home based practice setting. The specific aims of this project were to (1) gather, organize, and disseminate evidence-based resources on UI for occupational therapy staff; (2) design, implement and evaluate a knowledge translation professional development program on UI for occupational therapy practitioners; and (3) pilot a reflective coaching program for occupational therapy practitioners.
Chapter 3 Approach

Project Objectives

The objective of this project was to increase occupational therapy practitioners’ knowledge and confidence to treat UI in the home setting. The specific aims of the project specify how this outcome was achieved.

The first aim of this project was to gather, organize, and disseminate evidence-based resources on UI for occupational therapy staff. This was achieved in the design of the education program. The educational program was created using evidenced-based resources on UI. The participants were provided handouts to provide to their clients and to use for their own reference. Current research on the cost, prevalence, and psychosocial impacts of UI were also presented.

The second aim was to design, implement and evaluate a knowledge translation professional development program on UI for occupational therapy practitioners. The one hour educational program was completed using the knowledge translation model of education. The program included a review of previously taught information, selected new information, and interactive role playing activities. The new information was limited to encourage retention and implementation in daily practice with clients. Role playing activities were included to encourage interaction and open discussion between the occupational therapy practitioners. This information is included in the power point presentation in Appendix B.2.

The final aim was to pilot a reflective coaching program for occupational therapy practitioners. The reflective coaching program took place for four weeks following the educational program.
Setting

The setting for this project was Masonicare. This healthcare organization has facilities that provide care across the healthcare continuum for adults and older adults in the state of Connecticut. The home care occupational therapy practitioners working out of the corporate office located in Wallingford, Connecticut were the participants in this project. This organization reported urinary incontinence as an area that was not adequately addressed by the home care occupational therapy practitioners.

Participants

This project was advertised in an email sent to the occupational therapy staff employed in the Wallingford, Connecticut office of Masonicare. The email described an educational program for treating UI and optional participation in coaching sessions. Five occupational therapy practitioners attended the educational program and two of them volunteered to participate in coaching sessions for four weeks following the program. Consent was obtained to participate in the survey process, educational program, and coaching sessions.

Design

The knowledge translation model of education was used to design a one hour educational program for all participants. Two participants who attended the educational program volunteered to participate in one-on-one coaching sessions for four weeks that used the Framework for Reflective Questioning. The coaching participants took part in a 15 minute phone call once per week for four weeks. All participants completed a self-assessment survey prior to the education program and all participants completed a post survey four weeks after the program when all the coaching sessions were completed. All participants included a unique code on their surveys to maintain anonymity during the survey process.
Tool

**NBCOT self-assessment tool.** The electronic survey was used to gather data from the practitioners before the educational program and four weeks later when the coaching sessions concluded. With permission from NBCOT, the survey was adapted from the NBCOT OTR Self-Assessment tool for Older Adults. The survey items were slightly altered, with permission, to ensure the participants applied their knowledge and confidence to UI. This survey was used for occupational therapy practitioners to self assess their confidence and knowledge treating adults with urinary incontinence. The survey also included nine background questions on the pre survey to determine any variables in the responses, but these questions were not included on the post survey. Ten questions from the NBCOT OTR Self-Assessment tool for Older Adults were rated on a Likert scale from 0 to 3. The participants were provided with a description of each rating category.

<table>
<thead>
<tr>
<th>SELF-ASSESSMENT TOOL RATING SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

The description of the ratings were listed in each question. Survey Monkey was selected as the platform to administer the survey. The survey was used to evaluate the effectiveness of the
educational program and the impact it had on the occupational therapists’ self-reported competence when treating adults with urinary incontinence.

**Process and Activities**

**Knowledge translation educational program.** After a review of the literature, the knowledge translation model of education was determined to be the most effective way to produce a change in the daily practice of healthcare providers. The education program was designed utilizing the key concepts of this model. This program was one hour and it took place in a conference room at the Wallingford, Connecticut office of Masonicare. The format for the program was

- 15 minutes for overview of educational program, distribute handouts and powerpoint presentation, and administer the pre survey.
- 15 minutes to review background information on UI and research relating to treatment in the home care setting.
- 20 minutes of education on interviewing techniques and role play activities to practice interviewing techniques.
- 10 minutes for conclusion and questions.

The information in the program included research that outlined the psychosocial impact of UI, a review of the anatomy of the pelvic floor, nervous system functions, interventions for each form of urinary incontinence, interview techniques, UI pharmacology, dietary recommendations, pelvic floor exercises, fall prevention, toileting equipment, bladder retraining, and modalities. Handouts were provided to the participants for reference and to provide to clients. The AOTA profile template was also provided to design occupation based treatment plans that are client centered and address UI issues.
Some of the information was novel for the participants and other information was already known. This balance of information was intentional to encourage the participants to incorporate a small amount of new skills more easily into their treatment sessions. A powerpoint presentation was used during the presentation and a copy was provided to all the participants. The knowledge translation model was utilized during the role play activity. Case studies were presented and participants role played how they would approach each client. All of the participants provided examples of how to interview clients with different incontinence issues. A portion of the program was used to share previous experiences with the large group about challenges and successes with treating UI in adult and older adult clients.

The People-Environment-Occupation-Performance (PEOP) model was used to identify and address problems that limit occupational performance (Bass, Baum & Christiansen, 2015). PEOP is often used for health promotion programs that are designed at rehabilitation centers and community settings (Cole & Tufano, 2008). This model was used to enhance the educational program by including information on personal and environmental factors of UI.

**Reflective questioning coaching sessions.** The format for the coaching sessions was adapted from the Framework for Reflective Questioning from the Center for the Advanced Study of Excellence (CASE) in Early Childhood and Family Support Practices. This framework is utilized in early intervention practice settings to facilitate depth of understanding and awareness of strengths and weaknesses with clinicians (Rush, Shelden & Raab, 2008). Two occupational therapy practitioners volunteered to participate in a reflective coaching program for four weeks immediately following the professional development program. On a weekly basis, occupational therapy practitioners participated in a phone call individually with the researcher to discuss specific clients on their caseload. In this experience, occupational therapy practitioners were
asked to share their current caseload and clients who may benefit from UI intervention. During the coaching sessions, the researcher recorded the participant’s responses into a grid that was designed by the CaseTools Framework for Reflective Questioning. This grid structured the discussion and provided questions to identify all areas of the model. The participants asked for assistance with gathering baseline data, treatment interventions, and interviewing techniques. They were provided with educational handouts, data collection resources, and problem solving strategies to progress their clients plan of care based on the participant’s needs. The participants shared their personal experience and the changes they experienced in the confidence and knowledge with treating adults and older adults with UI.

Data Analysis

The self-assessment responses were compared in the pre and post survey to identify individual and group changes. The survey questions identified areas of the occupational therapy process as it relates to UI. Additional information gathered from the participants included years of practice, employment status, patients on caseload with UI in the last month, if the practitioner was currently treating UI, reasons for not addressing UI, checklist of current methods they address UI, and a list of UI educational courses completed. This demographic information was also analyzed to provide a probable explanation to the survey responses.

Statistical analysis. The survey data was collected and analyzed using Microsoft excel. Excel formulas and pivot tables were utilized to measure changes in the pre and post survey responses as well as summarize the impact the educational program and coaching sessions had on occupational therapy practitioner’s knowledge and confidence treating UI. Frequencies and percentages were used to analyze data using Microsoft Excel 2016 Version #15.20.
Consent

The participants provided consent by voluntarily completing the surveys, attending the educational program, and volunteering for the coaching sessions. An IRB application was submitted because human subjects were involved in the measurement of the program success and consent was required to approve the use of the practitioners’ responses in the project. NBCOT provided permission to use the OTR Self-assessment Tool for Older Adults. An application was submitted to the Institutional Review Board at St. Catherine University to gain consent to complete this project. The committee provided their approval on February 7, 2018 and the case number is #983.
Chapter 4 Outcomes

Results

Characteristics of participants. The demographic characteristics of the participants are summarized in Table 1. The results show the mean years of experience was 18 years ($SD=8.97$, range=22). When asked “how many of your patients have had UI in the last month?” the mean response was 4.1 ($SD=4.39$, range=10). Of the five participants, 80% are employed full time at Masonicare and 20% are part time. Of the total group of participants, 60% report they have treated clients with UI and 40% report they have not. In a multiple response question, the participants were asked to select all of the assessments and interventions they use with their clients that have UI. The participants report they complete screening (80%), formal assessment (20%), home modification (60%), adaptive equipment (40%), lifestyle modifications (60%), and pelvic floor exercises (60%). All of the participants recorded they would like to continue receiving education on UI.

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of Experience</td>
<td>18</td>
<td>8.97</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients with UI in the last month</td>
<td>4.1</td>
<td>4.39</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work Status

<table>
<thead>
<tr>
<th></th>
<th>Full time</th>
<th></th>
<th>Part time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you treated patients with UI?</td>
<td>4 (80.00)</td>
<td></td>
<td>1 (20.00)</td>
<td></td>
</tr>
<tr>
<td>Have you received referrals to primary treat problems associated with UI?</td>
<td>Yes</td>
<td>3 (60.00)</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
Do you want to receive continuing education on UI?

<table>
<thead>
<tr>
<th>Yes</th>
<th>5 (100.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

What do you currently do to address UI?

- Screening 4 (80.00)
- Formal assessment 1 (20.00)
- Home modifications 3 (60.00)
- Adaptive equipment 2 (40.00)
- Lifestyle modification 3 (60.00)
- Pelvic floor exercises 3 (60.00)

What questions do you have or specific topics would you like to learn more about related to UI?

- Exercises 2 (40.00)
- Relationship between UI and UTI 1 (20.00)
- Track and monitor client progress 1 (20.00)
- Refresher information and follow up on how company is addressing UI 1 (20.00)

**Changes in knowledge and confidence treating UI.** The pre and post survey results that rated confidence and knowledge treating UI from the NBCOT Self-Assessment Tool for Older Adults are summarized in Table 2. The pre survey yielded ratings of No Competence, Competent, Service Competent, and Mastery to the questions. In the post survey, one question had a Competent response and the other nine questions were rated as Service Competent or Mastery level by all participants. This result shows a general increase in knowledge and confidence treating UI amongst the participants.
### Table 2
**Pre and Post Survey Responses of Participants (n=5)**

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Participant</th>
<th>1*</th>
<th>2*</th>
<th>3**</th>
<th>4**</th>
<th>5**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing the use of standardized and/or non-standardized screening and/or assessment instruments to efficiently complete evaluation process</td>
<td>Pre</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Understanding and recognizing the impact of the normal aging process on occupational performance</td>
<td>Pre</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Determining the appropriate intervention strategy and/or approach to best support client-centered goals and priorities (e.g., lifestyle modification, physical activities, self management techniques, sensory integration, wellness, stress management)</td>
<td>Pre</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2</td>
<td>2</td>
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<td>Understanding roles and contributions of other service providers appropriate to the service delivery model (e.g., physician, physical therapy, speech language pathology, nurse, nutritionist/dietician, social worker, case manager, personal assistant, home health aides, senior program coordinators)</td>
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<tr>
<td>Identifying activities to enhance the older adult client’s occupational performance in the area of ADL, IADL, rest and sleep, education, work, leisure and social participation</td>
<td>Pre</td>
<td>2</td>
<td>2</td>
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<td></td>
<td>Post</td>
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<tr>
<td>Determining intervention strategies and approaches (e.g., compensatory, preventive, remedial, adaptive, biomechanical, lifestyle modification) that are age-appropriate, meaningful and support the appropriate frame of reference or model of practice</td>
<td>Pre</td>
<td>2</td>
<td>2</td>
<td>0</td>
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Identifying the need to adjust intervention techniques, adapt the intervention environment, and/or grade the intervention activity during a session with an older adult client:

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Using appropriate terminology and documentation methods (including electronic documentation) to communicate services and outcomes:

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Demonstrating appropriate therapeutic use of self to interact with the older adult client and relevant others:

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Determining the impact of the older adult client’s personal, social, cultural and physical contexts as they relate to the client’s perception of aging disease and disability:

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<th>Pre</th>
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*Note.* This survey was adapted with permission from the NBCOT Self-Assessment Tool on Older Adults with permission. 0=No Competence, 1=Competent, 2=Service Competent, and 3=Mastery. The * indicates the participant completed the educational program with coaching sessions. The ** indicates the participant completed the educational program only.

The pre survey responses showed 50% of items included a No Competent response and in the post survey there were no No Competent responses. None of the participants rated themselves as Mastery in response to *Understanding roles and contributions of other service providers appropriate to the service delivery model* in the pre survey, however at the post survey 20% of participants rated themselves as Mastery level. All participants rated themselves as Service Competent with *determining the impact of the older adult client’s personal, social, cultural and physical contexts as they relate to the client’s perception of aging disease and*
disability in the pre and post post survey and this may indicate a need for further education in this area in future programs.

The item with the greatest increase in knowledge and confidence was *determining intervention strategies and approaches that are age-appropriate, meaningful and support the appropriate frame of reference or model of practice*. In the pre survey, this item was rated 20% with No Competence, 40% Competent, and 40% Service Competent. The post survey reported 60% of the participants rated themselves a Mastery level of knowledge and confidence and 40% reported Service Competent.

The educational program with coaching sessions group report a 20% and 60% increase in ratings of the survey items. The participant with a 60% increase reported the reason for not treating UI is uncertainty of how to address cognitive issues in clients. The educational program only group reports one participant with a 70% increase in survey ratings, while the other two participants reports no increase in ratings. One of the education only group participants responded with three items rated lower than on the pre survey. The participant with the 70% increase in ratings recorded on the survey that they received no UI education prior to this program and had not treated anyone for issues with UI prior to the educational program.

**Qualitative data from coaching sessions.** Coaching sessions in this project were effective with increasing confidence and knowledge of UI treatment for the occupational therapy practitioners. Both participants recorded higher ratings in their post survey scores. The responses of each participant during each session are summarized in Table 3.
### Table 3

**Summary of Topics and Reflections from Coaching Sessions**

<table>
<thead>
<tr>
<th>Coaching topic by week</th>
<th>Participant 1</th>
<th>Participant 2</th>
</tr>
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<tbody>
<tr>
<td><strong>Week 1</strong>&lt;br&gt;What do you want to know about UI and what do you need to begin treating?</td>
<td>Identified goal for the week was to improve ability to get clients to trial the UI program. Participant was provided with UI brochure and a pelvic floor exercise worksheet.</td>
<td>Identified goal for the week was to gather data on nighttime voids for two clients with cognitive issues. Participant was provided with a simplified voiding log.</td>
</tr>
<tr>
<td><strong>Week 2</strong>&lt;br&gt;What skills did you use in your treatment planning and what did you learn?</td>
<td>Practiced initiating a conversation about UI and referred to therapeutic use of self skills. Reports feeling comfortable initiating conversation about UI program.</td>
<td>Educated clients on using voiding log, completing pelvic floor exercises, and identifying type of incontinence. Reports feeling comfortable with these topics.</td>
</tr>
<tr>
<td><strong>Week 3</strong>&lt;br&gt;How are you currently addressing your clients UI needs?</td>
<td>Addressed UI and educated clients on UI to each new client this week. Reports greater confidence with educating on UI.</td>
<td>All clients report less incontinent episodes and demonstrate competence with exercise program. This participant created a data collection method for clients with cognitive deficits.</td>
</tr>
<tr>
<td><strong>Week 4</strong>&lt;br&gt;How are your clients progressing and what do you plan to do with UI programming knowledge?</td>
<td>Identified one client on caseload for UI program. Participant would like to get more practice with educating on exercises and interventions.</td>
<td>Discharged two clients with only one episode of UI per night. Third client is reporting less urine leakage and reduced frequency. Participant would like to continue reviewing this information with a coach and likes learning new ideas.</td>
</tr>
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</table>

*Note.* P1 is participant 1 for the survey outcomes and coaching session. P2 is participant 2 for the survey and coaching session.

All coaching participants reported improvement with *determining the appropriate intervention strategies and/or approach to best support client-centered goals and priorities.* The coaching sessions mainly focused on interacting with client when discussing UI, selecting
appropriate intervention, writing goals, and adjusting interventions based on the client’s
cognition or progress. The success of these topics are reflected in the responses on the post
survey.

The coaching sessions followed the Framework for Reflective Questioning grid. The grid
was used during the coaching sessions to gather qualitative data on thoughts, feelings, and
opinions. Responses from the participants in the first week of coaching related to what the
participants knew about UI and identification of appropriate clients. All participants verbalized
wanting to improve their ability to convince clients to participate in the UI program. Additional
resources and handouts were provided to facilitate each participants’ goals with their clients.

The second week of coaching produced conversations about specific clients and
treatment progression. One participant reported having three clients that required UI
intervention. This participant was provided with alternative solutions to collecting data due to the
client’s cognitive status and low vision status. The second participant reported difficulty
recruiting clients and was continuing to review interview techniques and explanation of the
prevalence of UI.

The third week of coaching was spent reviewing data and specific interventions. The
participant with three clients reported a reduction in the number of incontinent episodes in two
out of the three clients. This participant reviewed pelvic floor muscle training exercises and the
clients all demonstrated competence with the exercises. The second participant reported feeling
proud that she was able to remember to discuss UI issues in all of her evaluations that week and
reports feeling more confident moving forward.

The final week of coaching sessions were used to summarize the experience and discuss
next steps with their clients and professional growth with UI programming in the home care
setting. The first participant stated “I think its great to go over this stuff with someone. I get new ideas and learn what to do.” This practitioner plans to continue UI interventions with one out of three clients and two of the clients were discharged in the final week. The second therapist identified a new client to initiate UI evaluation, identified a data collection tool, and prepared an exercise handout in preparation for the conversation with this client. This therapist stated “I feel more aware of this problem and am looking for it with my patients now. I hope I can get this patient to participate so I can improve my UI skills.”

Overall, the coaching session participants reported a positive impact on their occupational therapy practice and they feel more knowledgeable and confident to treat UI.
Chapter 5 Discussion

Challenges of Professional Development in the Home Care Setting

UI is a prevalent condition in adults and older adults. Occupational therapy practitioners working at Masonicare reported feeling they lack knowledge and confidence treating UI issues with their home care clients. The education of home care practitioners must be conducted in a different method than occupational therapists working in a facility to effectively facilitate the translation of new clinical skills. Home care practitioners are independent in the field with limited interaction with colleague and supervisors. This reduces the opportunities to collaborate with colleagues and apply new skills while working “in the moment”. The independent nature of this setting requires a different approach to present new clinical skills. In home care agencies, educational materials are typically provided electronically and questions are communicated in email or over the phone. This structure does not adequately provide learning for individuals who best learn in a kinesthetic style. Organizing a time for continuing education programs can be challenging with home care managers. Practitioners are driving in a variety of locations and have changing schedules based on their clients needs. Occupational therapy staff report an interest in continuing to be educated on UI topics and report they found continuing education helpful to apply in their practice. This finding suggests that other health issues should be addressed with home care staff in the large group educational program and coaching session format.

Managers in home health agencies should consider organizing continuing education times on a regular basis to address the topics of interest of their practitioners. By allowing the practitioners to jointly create the education topics, managers may find increased attendance at continuing education events. UI is one common health issue facing home health clients, but there are numerous issues that therapy practitioners should receive continuing education for strategies.
Importance of Intra- and Inter- Professional Development on UI

UI issues are best addressed by an interprofessional team. Physicians, nurses, physical therapists, and occupational therapists use different skills to help their clients improve bladder function. Interprofessional education in occupational therapy education is a new concept being introduced in occupational therapy programs. Utilizing the skills of each discipline, the interprofessional team can create a comprehensive care plan to address the variety of issues associated with urinary incontinence. The purpose of this education was to better prepare occupational therapy practitioners for the interprofessional collaboration with allied health professionals in the clinical setting (Gee & Holst, 2016). UI is not currently a required accreditation standard for occupational therapy education (American Occupational Therapy Association, 2011). This prevents students from being educated on entry level UI skills during their education. This results in occupational therapy practitioners having a varied level of training in UI and makes it challenging to properly design UI education that reaches every skill level. This variability suggests a coaching model may best meet the needs of a large group of occupational therapy practitioners. In this project, the survey results suggest that one on one coaching sessions created greater knowledge acquisition and confidence treating adults with UI. Approximately half of the participants (40%) reported never treating clients with UI prior to this project and this education was their first experience to learn what occupational therapy practitioners do for UI. Coaching programs may help home care occupational therapy practitioners integrate new skills into their practice.

Due to the high prevalence of UI in home care clients, it may be beneficial for home care agencies to include UI education during their orientation or provide resources for reference for new employees. Education on secondary issues related to UI, including fall prevention, skin
integrity, and home modifications, should be included in future programs to promote an interdisciplinary approach to treating UI in the home setting. The Centers for Medicare and Medicaid Services (CMS) is changing reimbursement in the healthcare systems to value-based payments. Value-based payments are based on the quality of care clients receive rather than the quantity (Centers for Medicare and Medicaid Services, 2017). UI and the secondary issues related to UI can lead to expensive healthcare costs. This makes proper intervention essential in improving outcomes and ensuring cost effective care.

**Knowledge translation for Complex Health Issues like UI**

Knowledge translation education focuses on identifying the best evidence and pathways to follow the evidence (Davis et al., 2003). In this project, the group that attended only the education program had 15 to 26 years of experience. This may explain why most of the participants did not report an increase in knowledge and confidence. One third of the education group reported they have received education on UI previously and this may explain why there was little increase in knowledge after the program. The interventions and evidence may be information they have learned from previous education. Considering the advanced level of experience of the participants, it may have been beneficial to include higher level information in the educational program. One third of the participants who only attended the education program reported no increase in knowledge or confidence. This result suggests that a continuing education workshop may provide baseline knowledge, but further education should be provided in another format, such as coaching. However, one participant that attended the education program reported an increase of knowledge and confidence in 70% of survey questions. Another participant reported a decrease in knowledge in three areas. This decrease may be due to the participant being unaware of the variety of interventions that are involved in UI programming when the pre
survey was completed. Due to the variability in responses, it may be beneficial to continue to offer large group education programs to introduce new clinical information, but also establish coaching programs to provide occupational therapy practitioners with a follow up method to adequately integrate new information and skills.

The reflective questioning coaching framework was designed to help the participants develop a plan for action before the conclusion of each conversation (Rush et al., 2008). This may explain the increase in knowledge and confidence reported by all coaching participants. Specific concerns, data collection methods, intervention grading, and interview techniques were addressed in coaching sessions and this increased knowledge and confidence. The participants reported they felt more comfortable addressing UI issues with their homecare clients. One coaching participant reported feeling more comfortable discussing the benefit of UI programming and reported addressing this in each new evaluation. However, this participant did not identify clients to complete UI programming with until the last week of coaching. A longer coaching program may have produced a greater change in clinical knowledge and confidence and their ability to recruit appropriate clients for UI programming. The other coaching participant reported feeling more confident collecting data using a variety of methods. This participant reported liking the coaching method and would like to continue to be coached for UI programming.

The format of the coaching sessions was a fifteen minute phone call once per week. The time commitment was minimal and there were no additional resources required to conduct the coaching session. Reflective questioning coaching framework may be an effective and cost-efficient model for professional development of home care occupational therapy practitioners. It may be beneficial to create connections between professional development programming and the
number of clients screened, evaluated, and recruited for UI programming. This may provide additional information on effective education methods. The coaching findings suggest changing practice behaviors may require additional training and coaching.

**Knowledge Gaps on UI and Occupational Therapy**

The role of occupational therapy in UI needs more development. While occupational therapy practitioners have a unique role in addressing context and activity demands, psychosocial aspects and performance patterns, the literature describes musculoskeletal interventions that are also completed by nurses. This requires further research and clarification of the role of OT in UI management.

UI can result in social anxiety, depression, loneliness, and poor health outlook which all contribute to poor quality of life (Aguilar-Navarro et al., 2012; Fultz & Herzog, 2001; Mitteness, 1987; Sims et al. 2011; Sinclair & Ramsay, 2011). UI can be a symptom of an individual’s inability to complete occupations, such as manage clothing, perform hygiene, transferring on and off the toilet, and cognitive deficits (Neumann et al., 2009). Occupational therapy practitioners need guidelines to address the occupations that can be affected by UI. Occupation-based interventions and environmental modification need further development.

**Limitations**

A limitation of this project was the small sample size. Five participants voluntarily agreed to participate in this project, but other therapists that were invited were unable to attend. Of the participants, 80% had more than ten years’ experience working with adults and this may impact the changes in the pre and post survey. Participants with less of years of experience or experience in a variety of practice settings, may show a greater change after the educational program and coaching sessions.
Recommendations

Future recommendations include providing more than one opportunity for occupational therapy practitioners to attend the program. Recruiting participants was a challenge during this project and it may be beneficial to schedule an educational program more than once, at different times of day and on different days of the week for a larger number of participants. Sending the email advertisements a few weeks prior to the program may increase participation and the ability of the practitioners to manage their schedules. Future suggestions include applying the knowledge translation model of education and coaching framework to other specialty programs in the home care setting. These models do not only apply to UI programming and may benefit other occupational therapy led home programs.

Coaching recommendations include providing a formal coaching document that the participant can complete during the week prior to the scheduled coaching session. Utilizing a formal document can ensure a participant focused coaching program emphasizing participant goals and progress.

Conclusion

A UI educational program and coaching sessions can improve knowledge and confidence for occupational therapy practitioners working with adults and older adults in the home setting. Coaching is a cost effective and efficient method for producing a change in knowledge and confidence in home care occupational therapy practitioners.
References


Schwellnus, H. & Carnahan, H. (2014). Peer-coaching with health care professionals: what is the current status of the literature and what are the key components necessary in peer-
doi:10.3109/0142159X.836269


doi:10.1576/toag13.3.143.27665


Appendix A: Expanded Literature Review

Appendix A.1 Overview of Urinary Incontinence, Risk Factors, and Impact on Daily Life

Urinary incontinence (UI) is classified as a symptom, not a disease and this creates an opportunity for occupational therapy practitioners to intervene (Nazarko, 2008). The change to value based payment systems emphasize the importance of effective management UI issues (Centers for Medicare and Medicaid Services, 2017). The purpose of this system is to encourage the use of high-value services that are low cost, rather than the opposite (Jena, Stevens, & McWilliams, 2014). Low cost interventions, such as therapy services, will be encouraged rather than medical or surgical interventions. Interdisciplinary collaboration is predicted to increase with this payment system (Dowd, Swenson, Parashuram, Coulam & Kane, 2016).

The risk factors for developing UI are elevated BMI, obesity, constipation, increased age, menopause, alcohol consumption, smoking, hypertension, diabetes, organ prolapse, and increase physical assistance to move (Kottner et al., 2014; Ostle, 2016). Common causes of urinary incontinence are childbirth, loss of tissue tone, bladder or urethral scarring, infection, obstruction, tumors, neurogenic problems, and certain medications (Butts, 1979). Overflow UI is most common in elderly males with enlarged prostates, and uterine prolapse in females (Nasr & Ouslander, 1998, p. 352). The various types of UI can impact individuals with different levels of severity. Individuals with urge incontinence reported a greater impact on quality of life than mixed, functional, or stress incontinence (Aslan et al., 2009).

The American College of Physicians (ACP) developed six recommendations for nonsurgical management for UI. These recommendations include pelvic floor muscle training for stress UI, bladder training for urge UI, and pelvic floor muscle training and bladder training for mixed UI (Pair & Somerall Jr., 2018). Approximately report 90% of individuals who participated
in a noninvasive bladder retraining program would recommend it to a friend or relative (Abdelghany et al., 2001). Pads were reported as the most common strategy used amongst adults receiving home health services who suffered from mixed incontinence. Clients losing large amounts of urine report using pads more than patients with leakage. Pads are not recommended as they do not improve continence (Du Moulin, Hamers, Ambersen, & Halfens, 2009).

**Appendix A.2 Screening and Assessment of UI**

The assessment process for an individual with UI is comprehensive and requires the collection of many forms of information. A comprehensive UI assessment completed by an occupational therapist should include a summary of the symptoms, duration of incontinence, impact on quality of life, medical and surgical history, obstetric history, medications, and 3-day input and output diary (Choi, Lam, & Weng, 2015; Ostle, 2016). The occupational therapist can collaborate with a continence nurse or other specialists for additional testing such as a urinalysis, bladder scan to detect residual urine volume, and physical examination of abdomen, rectal, and vagina (Ostle, 2016). Assessing abdominal muscle tone can provide information about the pelvic floor muscle tone. If a client has a relaxed abdominal wall then the pelvic floor musculature may have low tone (Butts, 1979).

There are several tools available for occupational therapists to use in their initial assessments. Screening questionnaires are used most often because they are inexpensive and practical in the time constraints of the clinical setting (Choi et al., 2015). The Incontinence Impact Questionnaire (IIQ), the Urogenitary Distress Inventory (UDI), the Michigan Incontinence Symptoms Index (M-ISI), the International Consultation on Incontinence Modular Questionnaire (ICIQ), and the Kings Health Questionnaire are commonly used to assess the type of UI and severity of symptoms (Abrams, Avery, Gardener, & Donovan, 2006; Kaya, Akbayrak
et al., 2015; Skorupska et al., 2017; Suskind et al., 2014). The UDI, IIQ, M-ISI, ICIQ, and King’s Health Questionnaire have been researched and found to be reliable and valid tools to use when evaluating UI (Lim, Llong, & Yuen, 2017; Suskind et al., 2015; Uemura, & Homma, 2004; Utomo et al., 2015). These tools can be used to identify and formulate goals for treatment planning. Questionnaires can help quantify symptoms but these tools are not helpful for improving UI (Nambiar et al., 2018).

An occupational therapy practitioner should be present when a client completes the questionnaire to ensure it is completed properly. The accuracy is directly correlated with the education level of the client completing the form (Costantini et al., 2009).

Appendix A.3 Occupational Therapy and Interprofessional Interventions of UI

It is important to accurately identify the type of incontinence to design the most appropriate treatment plan and select appropriate interventions (Choi et al., 2015). Interventions that are used by occupational therapy practitioners are pelvic floor training, behavioral training, prompted voiding, lifestyle modifications, and electrical stimulation. The intervention with the least adverse complications should always be the first approach (Nasr & Ouslander, 1998). Bladder retraining programs can reduce symptoms of nocturia and episodes of UI and this requires collaboration with the client or their primary caregiver (Karon, 2005; Majumdar, Hasan, Saleh, & Toozs-Hobson, 2010). Majumdar et al. (2010) report 36% of individuals who participated bladder retraining were cured of all UI symptoms.

Physicians can provide medical and surgical treatments for UI, as well as prescribe medications. Surgical solutions for stress incontinence include tension-free vaginal tape (TVT), transobturator tape (TOT), biological slings, open colposuspension, and transurethral bulking agents (Ostle, 2016). Medical treatments for urge incontinence include medications, botulinum
toxin injections, clean intermittent self-catheterisation (CISC), augmentation cystoplasty, and urinary diversion surgery (Ostle, 2016). Some prescription medications can increase the effects of UI or cause UI. UI inducing medications are diuretics, anticholingeric agents, psychotropic agents, opioid analgesics, adrenoceptor antagonists and agonists, and calcium agonists (Nasr & Ouslander, 1998). Conditions that can exacerbate UI include excessive fluid intake, metabolic disorders, and volume overload (Nasr & Ouslander, 1998).

Nurses and occupational therapy practitioners often collaborate in the home setting as they both have the complementary skills and opportunities for specialty certification to address UI (Karon, 2005). Nurses trained in incontinence can provide assessment, pelvic floor exercises, and bladder training interventions (Choi et al., 2015). Continence nursing assessments include history of incontinence, investigate input and output, physical examination, assessment of activities of daily living, and medication review (Nazarko, 2008). Assessments include physical exam checking for prolapse and bladder scans to check if a client has a full bladder or overflow (Nazarko, 2008). Medications are reviewed to identify impacts on bladder function, but medications that cause drowsiness or lack of alertness can lead to incontinence (Nazarko, 2008).
References


Appendix B: Expanded Description of the Approach

Appendix B.1 Self-assessment of Confidence and Knowledge of UI (Adapted with permission from NBCOT OTR Self-Assessment Tool for Older Adults)

Background Questions

A. How many years (of your occupational therapy career) have you worked with adults and older adults? ______

B. What is your current work status at Masonicare?
   a. Full time (40 hours per week)
   b. Part time (less than 40 hours per week)
   c. Per diem

C. How many of your patients within the last month have had problems with urinary incontinence (UI does not have to be the primary reason for the OT referral)?
   a. 0
   b. 1-3
   c. 4-6
   d. 7-9
   e. 10 or more

D. Have you received referrals to primarily treat problems associated with UI? Yes or NO

E. If UI was not the reason for referral, have you treated UI problems?

F. If you do not address UI, what is the primary reason for not addressing this issue? (lack of knowledge, beyond the scope of OT, not enough time if UI is not the primary diagnosis, etc.)

G. If you do address UI, what do you typically do? Check all that apply.
   a. Screening
   b. Formal assessment
   c. Referral to other disciplines
   d. Home modifications
   e. Adaptive equipment
   f. Lifestyle modifications
   g. Pelvic floor muscle training
   h. Dietary Changes
   i. Electrical modalities

H. Please list continuing education courses you have completed on urinary incontinence:

______________________________________________
I. Do you think it would be helpful to receive in-service education on UI? Yes or NO
J. If yes, then what questions do you have or specific topics would you like to learn more about related to UI?_________________

**SELF-ASSESSMENT TOOL RATING SCALE**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td><strong>No competency:</strong> - Unfamiliar with concept or practice of the skill</td>
</tr>
<tr>
<td>1</td>
<td><strong>Competent</strong> - Familiar with concept of skill but infrequently applies this in current practice setting</td>
</tr>
<tr>
<td>2</td>
<td><strong>Service competent</strong> - Implements skill across routine and complex situations within guidelines of current practice setting</td>
</tr>
<tr>
<td>3</td>
<td><strong>Skill mastery</strong> – Recognized specialist expertise</td>
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For the problem of urinary incontinence, how would you rate your current competency for:

1. Prioritizing the use of standardized and/or non-standardized screening and/or assessment instruments to efficiently complete evaluation process
2. Understanding and recognizing the impact of the normal aging process on occupational performance
3. Determining the appropriate intervention strategy and/or approach to best support client-centered goals and priorities (e.g., lifestyle modification, physical activities, self management techniques, sensory integration, wellness, stress management)
4. Understanding roles and contributions of other service providers appropriate to the service delivery model (e.g., physician, physical therapy, speech language pathology, nurse, nutritionist/dietician, social worker, case manager, personal assistant, home health aides, senior program coordinators)
5. Identifying activities to enhance the older adult client’s occupational performance in the area of ADL, IADL, rest and sleep, education, work, leisure and social participation
6. Determining intervention strategies and approaches (e.g., compensatory, preventive, remedial, adaptive, biomechanical, lifestyle modification) that are age-appropriate, meaningful and support the appropriate frame of reference or model of practice
7. Identifying the need to adjust intervention techniques, adapt the intervention environment, and/or grade the intervention activity during a session with an older adult client
8. Using appropriate terminology and documentation methods (including electronic documentation) to communicate services and outcomes
9. Demonstrating appropriate therapeutic use of self to interact with the older adult client and relevant others
10. Determining the impact of the older adult client’s personal, social, cultural and physical contexts as they relate to the client’s perception of aging disease and disability
Appendix B.2 Agenda, Resources and Materials Used in the Educational Program

Agenda

- 15 minutes for the introduction. Overview of program, distributed handouts, provide copy of powerpoint presentation, and administer the online survey.
- 15 minute to review background information. Statistics on prevalence of UI, cost of UI, reviewed types UI, causes, anatomy, nervous system, psychosocial impacts, pharmacology, and variety of interventions.
- 20 minutes to introduce interview techniques and role play with case studies to practice interviewing.
- 10 minute for conclusion, questions, and feedback from participants.

Resources and Materials

Please contact author for handouts.
Powerpoint handout.

URINARY INCONTINENCE MANAGEMENT FOR ADULTS AND OLDER ADULTS
Presented by Jaimee Hegge, MS, OT/L, OTR/L

Objectives
- Define incontinence and it's management
- Identify factors that increase the risk for urinary incontinence
- Improve confidence within the healthcare team about urinary incontinence

Overview of project

Group 1
- Complete pre-survey
- Participation in intervention sessions
- 2 weeks after intervention complete post-survey

Group 2
- Complete pre-survey
- Participation in intervention sessions
- Complete 4 weeks of coaching sessions
- Complete post-survey
Write down words and/or concepts that come to your mind when you think of urinary incontinence and occupational therapy.

Purpose

- UI
- OT
- PT

Impacts of UI
Occupational Performance and Participation
Impacts of UI on Psychosocial Well-being

- Psychological impact of UI may lead to emotional distress
- Quality of life
- Overall health transitions
- Social isolation and depression

Anatomy of the Pelvic Floor

- 2 layers of muscle
  - Superficial perineal layer
  - Deep transverse perineal muscle
- Pelvic diaphragm

Autonomic Nervous System

- Sympathetic nervous system
  - Sympathetic nerve fibers innervate the internal urinary sphincter and bladder neck, involves bladder
  - Prostaglandins
  - Stimulation of internal urethral sphincter
  - 5-HT receptor
PROFESSIONAL DEVELOPMENT PROGRAM FOR URINARY INCONTINENCE

4/1/18

Bladder Capacity

Types of Incontinence

- Ure
- Stress
- Med
- Functional
Pharmacology

- Anticholinergics
- Beta blockers
- Calcium channel blockers
- Alpha blockers
- Muscle relaxants
- Botulinum toxin injections
- Antidepressants
- Anticonvulsants
- Pain medications

Bladder Irritants

Medication and Food Irritants
- Smokers, alcohol, caffeine, spicy foods, citrus fruits, nuts
- Antibiotics, antihistamines, antispasmodics, nonsteroidal anti-inflammatory drugs

Diet Substitutions
- Low fluids
- High fluids
- Low caffeine, spicy foods

Other Irritants
- Chemical irritants, lye, hypochlorite
- Incontinence products, deodorants
- Medications, dyes, latex gloves

Occupational Therapy Interventions

- Pelvic floor muscle exercises
- Biofeedback
- Biofeedback and biojustice
- Pelvic floor muscle toning
- Behavioral therapies
- Relaxation exercises
Write down one new fact you learned about the role of OTs working with adults who have urinary incontinence.

How should we start talking about it...

- Health care changes
- Patient/individual needs
- Nephrology
- Urology
- Physical therapy
- Speech-language pathology

[Blank space]
Case #1

Maria is a 56-year-old woman discharged home from the hospital after being treated for urinary incontinence. She tells you she has noticed an increase in her urge to urinate and nocturia over the past several years. This is a normal part of aging. She has not talked to her doctor about it, but she is concerned and feels she needs to do something about it during her next check-up. Maria is not sure how to talk about it with her doctor and is not sure what she should tell him to her next check-up.

Case #2

John is a 75-year-old man who was recently hospitalized for the removal of a tumor in his bladder. A catheter was placed for three days. He required tending every few hours in the hospital. He was referred for an evaluation as part of his home care services. His wife tells you he wakes up with wet underwear and has difficulty getting to the bathroom in the mornings. John has not mentioned his incontinence during the initial interview with you.

What are some thoughts, questions, or comments on your mind about moving forward with treating adults with urinary incontinence?
Closing thoughts and questions

- What is one new thing you will use in your role with patients who have urinary incontinence?
- Are there any limitations or things you think need improvement?
- Questions or concerns?

Certifications

- [List of certifications relevant to the professional development program]

References

[List of references related to urinary incontinence and professional development]
AOTA Occupational profile template.

**AOTA OCCUPATIONAL PROFILE TEMPLATE**

"The occupational profile is a summary of a client's occupational history and experiences, patterns of daily living, interests, values, and needs" (AOTA, 2014, p. 513). The information is obtained from the client's perspective through both formal interview techniques and casual conversation and leads to an individualized, client-centered approach to intervention.

Each item below should be addressed to complete the occupational profile. Page numbers are provided to reference a description in the Occupational Therapy Practice Framework: Domain and Process, 3rd Edition (AOTA, 2014).

<table>
<thead>
<tr>
<th>Client Report</th>
<th>AOTA OCCUPATIONAL PROFILE TEMPLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason the client is seeking service and concerns related to engagement in occupations</td>
<td>Why is the client seeking service, and what are the client's current concerns relative to engaging in occupations and in daily life activities? (This may include the client's general health status.)</td>
</tr>
<tr>
<td>Occupations in which the client is successful (p. 55)</td>
<td>In what occupations does the client feel successful, and what barriers are affecting his or her success?</td>
</tr>
<tr>
<td>Personal interests and values (p. 57)</td>
<td>What are the client's values and interests?</td>
</tr>
<tr>
<td>Occupational history (i.e., life experiences)</td>
<td>What is the client's occupational history (i.e., life experiences)?</td>
</tr>
<tr>
<td>Performance patterns (routines, roles, habits, &amp; rituals) (p. 58)</td>
<td>What are the client's patterns of engagement in occupations, and how have they changed over time? What are the client's daily life roles? (Patterns can support or hinder occupational performance)</td>
</tr>
<tr>
<td>What aspects of the client's environments or contexts does he or she see as:</td>
<td></td>
</tr>
<tr>
<td>Supports to Occupational Engagement</td>
<td>Barriers to Occupational Engagement</td>
</tr>
<tr>
<td>Physical (p. 528) (e.g., buildings, furniture, pets)</td>
<td></td>
</tr>
<tr>
<td>Social (p. 528) (e.g., spouse, friends, caregivers)</td>
<td></td>
</tr>
<tr>
<td>Cultural (p. 528) (e.g., customs, beliefs)</td>
<td></td>
</tr>
<tr>
<td>Personal (p. 528) (e.g., age, gender, SES, education)</td>
<td></td>
</tr>
<tr>
<td>Temporal (p. 528) (e.g., stage of life, time, year)</td>
<td></td>
</tr>
<tr>
<td>Virtual (p. 528) (e.g., chat, email, remote monitoring)</td>
<td></td>
</tr>
<tr>
<td>Client Goals</td>
<td>Consider: occupational performance—improvement and enhancement, prevention, participation, role competence, health and wellness, quality of life, well-being, and/or occupational justice.</td>
</tr>
<tr>
<td>Client's priorities and desired targeted outcomes: (p. 534)</td>
<td></td>
</tr>
</tbody>
</table>

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Appendix B.3 Agenda, Resources and Materials Used in the Coaching Sessions

Framework for Reflective Questioning (Rush et al., 2008).

15-30 minutes: Summarize your clients receiving UI intervention, what new skills are you practicing, do you require other resources to complete your sessions. Provided voiding logs, exercise handouts, and strategies for data collection.

### Framework for Reflective Questioning

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Awareness</th>
<th>Analysis</th>
<th>Alternatives</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge/Understanding (What you know)</td>
<td></td>
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<tr>
<td>What do you know about...?</td>
<td>What is your current understanding of [topic, situation]?</td>
<td>How does that compare to what you want to know about...?</td>
<td>How could you find out about...?</td>
<td>How do you plan to learn more about...?</td>
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<tr>
<td></td>
<td>Prepenn (e.g.,)</td>
<td>How is that consistent with standards, evidence?</td>
<td>What different things could you do to learn more about...?</td>
<td>What options do you choose?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>What are other ways to view this for next time?</td>
<td>Why?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>How are you going to put that into place?</td>
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<tr>
<td>Practice (What you did)</td>
<td></td>
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<td></td>
<td></td>
<td>How is that consistent with what you intended to do (wanted to do)?</td>
<td>What else could you have done to make practice consistent with standards?</td>
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<td>Outcomes (What was the result)</td>
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<tr>
<td>Evaluation (What about the process)</td>
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