Nicaragua Project

Natalie Butz
Pacific University

Nicolé Wandell
Pacific University

Carla Syron
Pacific University

Emily Hess
Pacific University

Follow this and additional works at: http://commons.pacificu.edu/ipp

Part of the Occupational Therapy Commons

Recommended Citation
http://commons.pacificu.edu/ipp/26

This Innovative Practice Project is brought to you for free and open access by the School of Occupational Therapy at CommonKnowledge. It has been accepted for inclusion in Innovative Practice Projects by an authorized administrator of CommonKnowledge. For more information, please contact CommonKnowledge@pacificu.edu.
Description
The college of Health Professionals of Pacific University in collaboration with the Jessie F. Richardson Foundation, a non-profit organization, completed its fifth annual visit to Nicaragua in December 2011. An intradisciplinary team of Pacific University students and faculty from the dental health, occupational therapy, pharmacy, physical therapy, and physician assistant programs provided direct services to Nicaraguan elders, caregivers, and community members. The team worked with Nicaraguan gerontologist and physician Dr. Milton Lopez, as well as local nursing and physical therapy students to provide care to residents at La Providencia Hogar de Ancianos, in Granada, and Hogar de Ancianos Club Santa Lucia, in Esteli.

The team prepared for the out of country trip through fundraising events, donation gathering, marketing, and educating local community members about this rare opportunity to provide care for elders in Nicaragua. Upon return, the occupational therapy student team worked diligently to further develop the intradisciplinary team relationship, create evidence-based activities and documents for future generations of students, update the Nicaragua website pages, developed preparatory documents to aid student understanding of the trip goals, as well as presented research on cross-professional teamwork and methods of student education. The goal of this project is to assist each hogar in becoming self-sufficient in providing adequate health care to every one of its residents.

Disciplines
Occupational Therapy | Rehabilitation and Therapy

Rights
Terms of use for work posted in CommonKnowledge.

This innovative practice project is available at CommonKnowledge: http://commons.pacificu.edu/ipp/26
Nicaragua Project 2011 - 2012

Contributors:

Natalie Butz, OTS  
Pacific University

Nicolé Wandell, OTS  
Pacific University

Carla Syron, OTS  
Pacific University

Emily Hess, OTS  
Pacific University

Advisor:

Tiffany Boggis, MBA, OTR/L
Nicaragua Project

Description

The college of Health Professionals of Pacific University in collaboration with the Jessie F. Richardson Foundation, a non-profit organization, completed its fifth annual visit to Nicaragua in December 2011. An intradisciplinary team of Pacific University students and faculty from the dental health, occupational therapy, pharmacy, physical therapy, and physician assistant programs provided direct services to Nicaraguan elders, caregivers, and community members. The team worked with Nicaraguan gerontologist and physician Dr. Milton Lopez, as well as local nursing and physical therapy students to provide care to residents at La Providencia Hogar de Ancianos, in Granada, and Hogar de Ancianos Club Santa Lucia, in Estelí.

The team prepared for the out of country trip through fundraising events, donation gathering, marketing, and educating local community members about this rare opportunity to provide care for elders in Nicaragua. Upon return, the occupational therapy student team worked diligently to further develop the intradisciplinary team relationship, create evidence-based activities and documents for future generations of students, update the Nicaragua website pages, developed preparatory documents to aid student understanding of the trip goals, as well as presented research on cross-professional teamwork and methods of student education. The goal of this project is to assist each hogar in becoming self-sufficient in providing adequate health care to every one of its residents.
Table of Contents

Literature Review

Student Preparatory Handbook

• Basic Information
  o Fundraising

• Forms and Documentation
  o General intake form
  o Occupational therapy intake form

• Hogars
  o Hogar layouts & Information

• Educational Information

• Previous Interventions
  o Activities developed for use in Nicaragua

• Final Notes

Presentations

• Student Nicaragua project presentation

• Cross-Professional community presentation
Cross-professional Team Work: How Does it Work?
Natalie Butz OTS, Nicole’ Wandell OTS, Carla Syron OTS, and Emily Hess OTS

Our nation’s over extended healthcare system has forced facilities and government systems alike to closely analyze rising healthcare costs and corresponding service provisions. Cross-professional health care teams have been introduced to provide clients with more comprehensive services as well as continuity of effective care. Cross-professional teamwork is defined as individuals from different disciplines working in a team toward a common goal (Thylefors, Persson, & Hellstrom, 2005). Research on cross-professional teams has shown that these health care teams provide more holistic and effective care to clients than that of sole practitioners (Grant & Finocchio, 1995). Medical settings that foster this environment of collaboration have also demonstrated improvements in their patient outcomes (Grumbach & Bodenheimer, 2004).

Collaboration is not easily established. To create an effective and efficient collaborative team it requires time, organization and a solid foundation to build upon. To further investigate the aspects of cross-professional teams a review of available literature was completed and discussed. In this review, stages of team development, types and benefits of teams, and the differences in education surrounding teams were analyzed to discuss the strength and weakness surrounding this subject.

**Stages of team development**

Creating a professional team of various disciplines does not automatically make team members work well together. Team development evolves over time and through various stages. A team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable (Strategic Interactions Inc., 2009). When specialists working in a collaborative team combine their expertise, the belief is that more efficient and effective work will result, and that patients will receive a higher quality of care (Mayo & McCallin, 2003; Meindl, 1996). Although this assumption seems reasonable in practice, collaborative teams do not always work well together (Farrell, Schmitt, & Heinemann, 1988; Hackman, 1990). An effective team develops strategies to share leadership roles and processes to share accountability for their work products, shifting the emphasis from the individual to several individuals within the team (The Guide to Managing for Quality, 1998). Many theorists have argued that before an interdisciplinary team can establish open communication, flexibility in leadership, and coordination of efforts necessary for effective functioning, it must pass through a sequence of developmental stages (Farrell, 1976; Farrell et al., 1986; Hare, 1992; Tuckman, 1965). Psychologist Bruce Tuckman crafted the memorable phrase “forming, storming, norming and performing” in 1965. After reviewing more than 70 studies of the stages of group development, Tuckman & Jensen (1977) updated the stages as; testing and dependency (the ‘forming’ stage), conflict (the ‘storming’ stage), cohesion and consensus (the ‘norming’ stage), and functional role relatedness (the ‘performing’ stage). Tuckmen & Jensen (1977) used these stages to describe the path to high-performance that most
Testing and dependency is the initial stage in which the leader plays the dominant role as other members' roles and responsibilities are less clear (Mind Tools Ltd., 2012). A team in the forming stage is a set of self-sufficient individuals who lack a common vision of the team’s mission and roles, or, at most, see the mission and roles as arbitrarily imposed by authorities outside themselves (Farrell et. al, 2001). This stage is fairly short and may only last during the initial meeting period (Mind Tools Ltd., 2012).

In stage two, the conflict stage, teams are likely to become polarized in a power struggle between subgroups and team members with different views about how the group should be functioning divide into these subgroups (Farrell et al., 2001). The leader’s authority may be challenged as others jockey for position and their roles are clarified (Tuckmen & Jensen, 1977). As the members work together, they discover disagreements about their mission, how work should be organized, and how much control one member should have over others (Farrell et al., 2001). This is the stage when many teams fail as they try to focus on the job at hand without the support of established processes or relationships with their colleagues (Mind Tools Ltd., 2012).

The third stage, cohesion and consensus, occurs when team members review their history, analyze past successes, failures, and conflicts, and then negotiate a set of norms and establish a mission that becomes the foundation of the team’s culture (Farrell et al., 2001). These negotiations result in clarification about authority, members’ professional roles, and about their responsibilities as team members. The resulting roles and expectations become the foundation of the team culture, and are referred to during times of disagreement. (Farrell et al., 2001). The team develops a stronger commitment to the team goal and progress toward the goal is enhanced. There is often a prolonged overlap between storming and norming behavior. As new tasks come up the team may lapse back into typical storming stage behavior (Tuckmen & Jensen, 1977).

Functional role relatedness happens during the final stage when team members go through cycles of work, organized meetings and are able to resolve conflicts as they arise (Tuckmen & Jensen, 1977; Farrell et al., 2001). Leadership roles now vary from meeting to meeting and are determined by who has the expertise relevant to the problem at hand. (Farrell et al., 2001). Hard work leads directly to progress towards the shared vision of the goal and it is supported by the structures and processes that have been set up. Individual team members may join or leave the team without affecting the performing culture (Mind Tools Ltd., 2012). Team members are familiar with one another’s strengths and weaknesses and roles are assigned based on skill and expertise. Role bending may occur during this stage and professionals can blend their roles in order to work toward a shared goal (Farrell et al., 2001 & Mind Tools Ltd., 2012). In this stage, members express a greater sense of solidarity, they see the workload as fair and equitable, and they are more effective at their tasks. (Farrell et al., 2001). The leader is able to delegate much of the work and can concentrate on developing team members. Being part of the team at this stage feels "easy" compared with the beginning stages (Mind Tools Ltd., 2012).

With sufficient leadership and repeated evaluations of the team’s working experience, most
collaborative teams eventually develop a common team culture. Farrell et al. (2001) highlight that quiet members are supported when sharing their observations and expertise, dominant members are encouraged to restrict their contributions, and polite members are prompted to speak their minds. As anxiety decreases and team autonomy increases, defensive strategies become less necessary and the collaborative team is able to fully utilize the knowledge and skills of all its members (Farrell et al., 2001). The appreciation of contributions from each discipline is important for collaboration but it is also vital to remember that each contribution is made by a person. Valuing the people as well as the professions involved in collaboration ensures that people are able to connect on an interpersonal as well as an interprofessional level (Croker, Trede, & Higgs, 2012).

Types of Teams

The Roadmap Initiative developed by the U.S. National Institutes of Health identifies the need for scientists to “move beyond the confines of their individual disciplines and explore new models for team science” (National Institutes of Health, 2011). In doing so, these scientists will be able to address the intricacy of the health problems seen in our nation’s health care system today. Developing a multidisciplinary team requires more than locating a group of professionals in one common physical location. Individual members, the team as a group, the management, and the organization are mutually responsible for developing teamwork (Johansson, Eklund, &Gosman-Hedstrom, 2010). Individual team members must be willing to engage within the team, share information, trust the judgment of other professionals, and blur the lines of their professional boundaries. The increase in health care fields and the new development of hybrid fields has shifted the boundaries and scopes within individual healthcare fields (Norman, Best, Mortimer, Huerta, & Buchan, 2011), however to engage in this team, members must be able to first identify their own abilities and roles within their profession (Croker et. al., 2011). Once this confidence is built within personal professional boundaries, it allows members to form and identify their role within the team (Croker et. al., 2011). During the development of this team as roles are becoming defined, a climate of openness and a non-competitive profiling of professions will help facilitate the framework required for building cross-professional team work (Fougner, &Horntvedt, 2011). To further define this team it requires a more in-depth look at the organization of the team, in which the team goal, professional roles, client roles, assessment, and communication styles must be addressed.

Unidisciplinary and intradisciplinary teams are teams with the least organization and communication required (Johansson et. al., 2010). These teams are simply co-located, their common goal is defined by their major organization or company philosophy, however there is little to no communication between professions. This organizational strategy has proved beneficial, unidisciplinary teams have been found to aid in continuing professional development and improve service delivery within a professional field (Blastow et. al., 2006). Co-location has been seen to improve communication, which is viable to increase client healthcare results (Norman et. al., 2011).

As efficiency and effectiveness of care is challenged more research has emerged for multidisciplinary care teams. A multidisciplinary team allows professionals to work within the
boundaries of their own expertise as in unidisciplinary teams however professionals formally discuss client progress (Johansson et al, 2010). The management team may develop weekly or monthly meetings to aid the team members in sharing client information, though often professionals lack understanding of the roles and tasks of other professions within their team (Johansson et al, 2010).

When multiple perspectives are combined and the client centered goal setting is the purpose of communication the team is Interdisciplinary (Norman et. al, 2007). In an interdisciplinary group team members are willing to share their personal knowledge and judgments, as members work together they begin to trust each other and use others’ knowledge to help guide in the decision making process (Johansson et al, 2010). The interdisciplinary team allows the client to take a more central role within the guiding of treatment and the care plan.

When the client becomes the central component that guides the development of an integrated treatment plan, the team has become Transdisciplinary. In a transdisciplinary team, members use an integrated assessment tool to develop client needs and the treatment plan is carried out jointly by all team members (Johansson et al, 2010). Leadership in transdisciplinary team should shape a vision for the group, build group motivation, and articulate a strategy for the team’s success (Abrams, 2006). Though reaching this level of professional teamwork can be challenging, research has shown there are multiple benefits for both professionals and clients.

Benefits of Interdisciplinary Teams

Benefits of the utilization of an interdisciplinary team working in the healthcare field can be found in multiple areas within the system, including the clients, the healthcare workers providing the services, and the facilities for which the healthcare providers are providing the services to the clients.

“Interdisciplinary leadership has emerged from traditional models of leadership that are outdated in the health reform environment. Preliminary research suggests that interdisciplinary team leadership is a model of shared leadership that requires more development if it is to become the cornerstone of interdisciplinary team practice in a radically reforming health sector” (McCallin 2003). "For true interdisciplinary functioning, a team integrates its various disciplinary perspectives and maintains a network of cooperation and communication. This is in contrast to multidisciplinary functioning in which team members maintain their disciplinary lines” (Kuder, Gairola, & Hamilton, 2001). When true interdisciplinary functioning occurs within teams, benefits are observed providing and receiving services.

Clients can benefit from an interdisciplinary approach to their care in several ways. When the provider is more informed about the different disciplines that are available for him or her to interact within care settings, the client is more likely to receive the care that is the most effective and efficient as the provider is able to refer to the proper source for further care. Warsaw (1998), as cited by Kuder et al. (2001) stated that “providing the most efficient and highest quality care involves providing the most appropriate care for the individual, by the most appropriate care provider, in the most appropriate location.” The client is not mistakenly misled to the improper care provider for the treatment of their health condition. “Patients treated by interdisciplinary
healthcare teams enjoy better health outcomes, shorter wait times, and a greater degree of patient empowerment, all of which lead to an increase in patient satisfaction rates and cost savings to the health care system” (Petoukhov, 2010). The empowerment of patients as “active partners” in care is more established to serve patients of diverse cultural backgrounds (Grant & Finocchio, 1995). As one of Berwick’s (2005) requests for proposals, the statement of “no waste” (of resources and services) is an extrapolation of one of the Institute of Medicine’s dimension of quality, in which he explains that the more waste observed by the patient leads to perceived “sloppy” behavior of the providers causing more use of resources than necessary. When the proper resources are utilized, the client receives care more efficiently with the reduction of repetitive treatments and misuse of resources. This effectiveness leads to an increased satisfaction of the clients as less time and personal resources are utilized for care, such as personal monetary means and transportation. As cited by Petoukhov (2010), “McCallin (2003) suggests that patient satisfaction rates rise when patients are treated by a team, as opposed to a sole practitioner, as the continuity of care is greater in an interdisciplinary team environment.” “Providing coordinated care through an interdisciplinary team approach is a vehicle for achieving this goal (Kuder et al., 2001)."

Interdisciplinary teamwork can also benefit healthcare providers in a multitude of ways. Teamwork is essential for any rehabilitation program (Atwal, Tattersall, Caldwell, & Craik, 2006) and is very different than working in a group. Rather than working parallel to others, a team interacts and problem solves with its members to reach a solution. Health care professionals “benefit from interprofessional collaboration by gaining diverse knowledge of other practitioners on the health care team” as well as “more equal distribution of workload among team members, which contributes to an increase in the practitioner satisfaction rates” (Petoukhov, 2010). Provider workplace satisfaction is affected by “greater professional development and more appropriate use of intervention skills, providing intellectual stimulation and mutual support, [and] promoting the respect and acknowledgement of individual specialties” (Newfoundland and Labrador Association of Social Workers, 2011). When interdisciplinary care is utilized in a healthcare setting it encourages problem solving between disciplines that encapsulates the previous advantages discussed.

Not only do clients and providers benefit from interdisciplinary healthcare teams, but the facilities in which this care is provided also benefit. Interdisciplinary teams provide efficient and effective services to their clients. "It is reasonable to expect that interdisciplinary care for the elderly could prove more cost-effective than traditional approaches in the long term; by empowering older adults to manage their health and chronic conditions, future utilization of medical resources could be reduced” (Rowan, et al., 2009). Grant & Finocchio, (1995) suggests that there is potential across health professionals when collaboration is well coordinated to perform more comprehensive and cost-effective care, with stress towards health promotion. The study also reports the resources are maximized by the decrease of burden related to acute care facilities as the promotion of preventive care increase, facilitating the quality improvement efforts. When patients are more satisfied with the care received, they return to that particular provider or set of providers (Mezey, 2001). Clients, who return to their provider, continue to bring revenue for the facility. With the decrease in costs (as the providers are providing more effective services more efficiently) the revenue for the facility will increase as clients return for care (Reichheld, Markey & Hopton, 2000).
Teamwork and Current Interventions

There are several examples to be noted about the education and implementation of interdisciplinary care. Interdisciplinary teams in more rural areas have an advantage in that there are fewer members and care provided between the members must be carefully coordinated in an effort to provide as much care as possible with the limited resources available (Charles, Bainbridge, Copeman-Stewart, Kassam, & Tiffin, 2008). Students are being provided more opportunities for participation in service learning programs and activities that promote this type of teamwork. Hall & Weaver (2001) states that the students, who participated in their study, reported perceiving the benefits of interdisciplinary care for the clients, but need more guidance in regards to the perceived blurring of the professional lines. There are studies that report the use of specific group case for discussions to assist in the understanding of the roles of each profession and the importance of teamwork (Deutschlander, Conrad, Suter, and Lait, 2012).

Interdisciplinary Education Methods

Interdisciplinary education is viewed as an important component to creating more effective and client centered clinicians. Schuetz, Mann, and Everet (2010) state that "team-based primary care offers the potential to dramatically improve the quality and efficiency of care, but its broader adoption is hindered by an education system that trains health professions in silos." This statement describes feelings and issues experienced by many of today's health care providers. Despite it being an important component it is difficult to establish the best type of educational method and the best delivery method. Currently various methods for interdisciplinary education exist. Non-traditional teaching methods for this include problem-based learning, and the service/learning model. These teaching methods differ from the traditional classroom methods such as didactic lectures that emphasize separate training and education.

Hall and Weaver (2001) describe problem-based learning (PBL) as a means for small-groups where theory, and clinical components are integrated. A basic tenant of PBL is to start with what you know, and then determine what knowledge requires expansion. Knowledge acquisition, attitudinal and psychomotor skills are demanded from the learner within this model of learning. PBL differs from didactic lecture and learning due to the timing of the introduction of the problem. With PBL the problem is first introduced and methods for intervention and problem solving are discussed. Students who work in interdisciplinary groups consisting of occupational therapy, speech therapy, and doctors reported significant improvement with their understanding of each other’s roles in the healthcare team post practice-based case studies (Pettigrew, Lee, O'Sullivan, Henn, & O'Flynn, 2008). From this interdisciplinary group session one of the overarching responses from the students was the importance of the session on their future work. The service/learner model is described as a method of education that uses clinical settings to engage and challenge the learners to work together on addressing real clinical problems, along with patient education and health dilemmas of underserved populations (Hall & Weaver, 2001). Learning methods that include shadowing at early stages in health institutions provides examples of good role models in real world practice (Fougner & Horntvedt, 2011).
Service learning in rural areas

Research by Charles et al. (2008) supports that “rural practice in interprofessional teams enables students to gain an appreciation and understanding of the roles of the other professions more effectively than in urban settings.” Learning in rural settings provides a supportive environment due to the method of rural health care service delivery. While working in rural settings demands on students are not only limited to their clinical interdisciplinary work, but also to their social interaction in a foreign environment. Interdisciplinary team training completed in rural Kentucky found that students working in geriatric areas reported more positive attitudes toward elderly patients, and more positive perceptions of interdisciplinary education (Kuder et al., 2001). These results were based on pre-test and post-test report scores. Students also report home visits, and team approaches to health care as valuable components of their education. Additionally the “Rural Health Interdisciplinary Training Project has demonstrated that interdisciplinary geriatric teams can operate successfully in rural, primary care clinics to treat frail older patients and to train students” (Kuder et al., 2001).

Timing of education

Other aspects of interdisciplinary education include the timing of the educational intervention. For student interdisciplinary education Horak, O’Leary, and Carlson (1998) suggest that shared learning at an early stage may be better for facilitating interdisciplinary collaboration. This idea of early education is to support education that can be scheduled as part of the core of their program, and that early stage learning better facilitates interdisciplinary collaboration. Contrasting this thought is Petrie (1976), who suggests that individuals need to be secure in their own competency of their discipline. By providing interdisciplinary education intervention towards the end of one’s educational program it supports that students are secure with their own discipline. This supports the idea of a senior student or postgraduate student engaging in this model instead of a less experienced undergraduate student. Through student reflections collected by Fougner and Horntvdt student reflections and perspectives on their shadowing experiences were examined to analyze the varying thoughts and perspectives on student learning. Research findings of Fougner and Horntvdt (2011) discussed the contradictory feelings of second-year physiotherapy, occupational therapy, and nursing students following a period of interprofessional education through observational shadowing. Participants in this study reported that they felt positively about the emphasis on the importance of sharing knowledge in teams, but they also had feelings of uneasiness “with the thought of others taking over tasks they defined as belonging to their own professional area” (Fougner&Horntvdt, 2011).

According to Davis (1995) successful interprofessional courses must include faculty members that are available to students, have strong commitments to interprofessional coursework, and have collaboration and small group learning facilitation skills. A logistical challenge to successful scheduling of this is determining timing for interprofessional courses to fit into each profession’s varying class schedules.
In conclusion, a steady growth of evidence indicates that interdisciplinary teams play a role in staff satisfaction, patient outcomes and organizational fiscal bottom lines (Buelow, McAdams, Adams, and Rich, 2010). Interprofessional/interdisciplinary didactics increase the level of competence in service providers and quality of care provided (Rowan et al, 2009). LeFlore and Anderson (2009) state that an emphasis on communication in interdisciplinary teams, collaboration, and planning within a team experience is a different experience for students compared to the majority of classroom or clinical training experiences currently provided in health professions training. Students who partake in interprofessional education demonstrate more understanding of quality provided in health care services and the benefits of interprofessional teamwork. There is an emphasis on utilization of interprofessional education in place of the traditional Silos (traditional fragmentation of professions and services) that students are being educated in currently. Students report a benefit to their education through the use of an interdisciplinary training model.

Value among different groups benefiting from interdisciplinary care is significant for cutting healthcare cost for providers and clients while patients report better health outcomes, shorter wait times, and empowerment through participation and satisfaction (Petoukhov, 2010). Further research to investigate the cost benefits of interdisciplinary care and the health care system as reform is established is recommended. Petrie (1976) suggests the need for students to be secure in their own competency of their discipline prior to interdisciplinary education, with Hall & Weaver (2001) stating that the students who participated in their study reported perceiving the benefits of interdisciplinary care for the clients. As future practicing providers, students can look forward to gaining knowledge of other health care professions within a team as well as appropriate distribution of workload among the members of the team. Further research should be completed to explore the value of interdisciplinary strategies to promote health and well being and to prepare future professionals to meet the world’s growing healthcare needs.
References


Basic Information

This preparatory handbook has been prepared for future occupational therapy students who will be participants of the Nicaragua project. The purpose of this handbook is to give students an overview of useful information and documentation related to the Nicaragua trip.

“Before You Go” information

- Fundraising
- Trip Costs & Finances
- General information regarding Nicaraguan Hogars
- Typical Schedule while you are there.
- Education of the Caregivers

This information was compiled to help you feel more prepared for the journey you are about to embark on. The information will not provide all of the details of your trip, but instead it was created as a way to help you prepare for the possibilities.
Basic Information

Fundraising
Previous fundraising methods to assist students in financially preparing for the Nicaragua trip include:

- **Concert Fundraiser**
  - Charged $5 admission to the concert and used a friend’s house to host the event in order to minimize on costs
- **Mississippi Pizza**
  - A portion of all sales went to Nicaragua trip
- **Aztec Willie’s Restaurant and Salsa Dancing**
  - A portion of the cover charge was donated to Nicaragua trip
- **Sold greeting cards and jewelry at OTAO conference**
  - Proceeds of this fundraiser went directly to occupational therapy students attending the Nicaragua trip

The "Hidden" Trip Costs
- Travel clinics cost $90 on average for an appointment. Specific vaccines costs are in addition to this.
- Tips: oral typhoid pills are less expensive than the typhoid injection and have a longer vaccination period.
- Food costs can be relatively cheap in Nicaragua, depending on where you go. Try to eat in a large group and split a few meals. This averages about $7 each for dinner including a drink! Food carts can be an inexpensive way to eat too.
- Breakfast and lunch may be provided by the hotel you stay at. There are limited choices on what is provided so make sure to pack snacks such as Powerbars in case you don’t like the food options.

How the Hogars Operate
- Hogars in Nicaragua are primarily run by Hermanas (nuns). These Hermanas are in charge of the overall operation of the Hogar. All ideas must be approved by them before they are implemented. Hogars across Nicaragua vary in their set-up based on who is running them.
- Women and men are to remain in their respective sleeping areas in the Hogars when they are not participating in daily activities. All shower and sleeping areas are divided by gender.

Education of the Caregivers
- All professions provide a presentation to the caregivers and the hermanas if they choose to attend. Preferably these presentations are completed in Spanish
- Past presentations have included: transfer training, routine building, safe resident handling techniques, feeding safety and increased independence in self-feeding.

Excursion
- There is one day off and an excursion is generally planned for the group.
Forms & Documents

- **Interdisciplinary Intake Form**
  - This form is used to screen and document general information of each client.
  - This form assists dental personnel in determining the client’s needs in relation to oral hygiene and helps identify residents who could benefit from an in-depth evaluation by one or more of the professions.
  - Each person should have at least two copies of this form to bring to Nicaragua.

- **Occupational Therapy Intake Form**
  - This form was created for use by OT’s if a more in-depth evaluation is warranted based on findings from the initial screening.
  - Each person should have at least two copies of this form to bring to Nicaragua.

- **Caregiver Resource Manual**
  - These forms offer strategies for caregivers whom care for the elders. They cover a multitude of disabilities and solutions for adaptations. There are two versions, Spanish and English.
  - The Manual (Spanish version) in its entirety should be provided to each caregiver within the hogar (6 per hogar).
  - The forms with the applicable information are to accompany the OT Intake form within the client charts.
    - The bottom of the OT intake form contains recommendations and check boxes for which forms are included within the chart.
    - Multiple copies (at least 30 in Spanish) should be printed to ensure each clients chart contains the necessary information.

- **Activity Log for Volunteers**
  - This form offers volunteers a better understanding of possible activities and the degree to which participants require assistance.
This information was compiled to help you understand the intake process. As you review these forms become familiar with what questions you will be asking, their potential answers, and how to ask these questions in Spanish.
<table>
<thead>
<tr>
<th>Informacion Medica: Favor de marcar si ha tenido o no cualquiera de las siguientes enfermedades o problemas?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sí</strong></td>
</tr>
<tr>
<td>¿Es alérgico o ha tenido algún reaccion? (allergies)</td>
</tr>
<tr>
<td>¿Que tipo de reaccion tuvo (what ran do you have?):</td>
</tr>
<tr>
<td>Usted ha sido aconsejado alguna vez para tomar premedicacion antes del tratamiento dental? (pre-medicación)</td>
</tr>
<tr>
<td>Fiebre reumática? (Rheumatic Fever)</td>
</tr>
<tr>
<td>El remplazo de la cuyuntura? (Artificial Joint Replacement)</td>
</tr>
<tr>
<td>Sangrado excesivo? (Bleeding problema)</td>
</tr>
<tr>
<td>Phen-fen medicinas? (Phen Fen)</td>
</tr>
<tr>
<td>SIDA o infeccion por HIV? (AIDS or HIV)</td>
</tr>
</tbody>
</table>

**Cual es la fecha de su ultimo visita al doctor?** (Last Visit to Physician)  
**Cual es la fecha de su ultimo visita al dentista?** (Last Visit to Dentist)  
Clinician Signature  
Verbal consent was given if clinician signature is present

### CLINICIAN: complete the following

**Peso (BP):**  
**Referencia al Medico? (Physician Referral?):**  
**Sí (yes) No**  
**Sí respondo si, Identifíquelo (If yes please identify):**

**PSR:**

| Code 0: no bleeding or pockets over 3.5 mm | Code 3: deepest pockets 4-5.5 mm, bleeding and/or calcule |
| Code 1: no pockets, some bleeding present | Code 6: deepest pockets 6+ mm, bleeding and/or calcule |

**Inflamacion: Leve**

<table>
<thead>
<tr>
<th>Leve</th>
<th>Moderado</th>
<th>Severo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflamaciones: mild</td>
<td>severe</td>
<td></td>
</tr>
</tbody>
</table>

**Sangrado:**

<table>
<thead>
<tr>
<th>Sangrado: Poco</th>
<th>Moderado</th>
<th>Severo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sangrado: light</td>
<td>mod</td>
<td>heavy</td>
</tr>
</tbody>
</table>

**Placa:**

<table>
<thead>
<tr>
<th>Placa: light</th>
<th>mod</th>
<th>heavy</th>
</tr>
</thead>
</table>

**Subgingival calculis:**

| Subgingival calculis: light | mod | heavy |

**AAP Type:**

| healthy | gingivitis | mild chronic perio | mod chronic perio | severe chronic perio |

**Cavidad Obvia (Obvious Decay):**  
**Sí (yes) No**  
**No**  
**Arrancos o dientes fracturados (Root tips or fractured teeth):**  
**Sí (yes) No**

**Dolor Oral (Oral Pain):**

<table>
<thead>
<tr>
<th>Sí</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolor Oral (Oral Pain):</td>
<td>Respondo sí, indíqueme donde (If yes, identify where):</td>
</tr>
</tbody>
</table>

**REFERENCIA INMEDIATA AL DENTISTA? (dolor, absceso, cavidad obvia y grande)**

<table>
<thead>
<tr>
<th>Sí (yes)</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate referral to dentist? (pain, abscess, large obvious decay)</td>
<td></td>
</tr>
</tbody>
</table>

**Notas en Ingles y Espanol (Notes in English and Spanish):**

---

**Asistente Medico (PA Notes) Section:**

<table>
<thead>
<tr>
<th>Necesita examen fisico? (Needs full physical exam):</th>
<th><strong>Sí (yes) No</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peso (Pulse Rate):</td>
<td>Frecuencia Respiratoria (Resp. Rate):</td>
</tr>
<tr>
<td>Cardio Vascular CV:</td>
<td>Temperatura (Temp):</td>
</tr>
<tr>
<td>Edema? Sey (yes) or No</td>
<td>Pulmones (Lungs):</td>
</tr>
<tr>
<td>Deshidratacion? (signs of dehydration):</td>
<td><strong>Sí (yes) or No</strong></td>
</tr>
</tbody>
</table>

**Notas:**

---

---
### Tratamiento de Hoy (Treatment Provided Today): Dental

<table>
<thead>
<tr>
<th>Evaluación (Screening only)</th>
<th>Limpieza profilaxis (Adult prophly)</th>
<th>Limpieza grande (Gross Debridement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exámenes Limitados (Limited Exam)</td>
<td>Fluoruro (Flouride)</td>
<td>Ningun tratamiento (NO Ts Provided)</td>
</tr>
</tbody>
</table>

**Instrucciones de higiene Oral (OHI):**
- Cepillo dental (Toothbrush)
- Fluoruro (Floss)
- Cepillo prequeno (Proxabrush)
- Mouthwash

**Anestesia Local (LA):** (how much, where and what kind)

**Extracciones (extractions):** ________________ ________________ **Otro (other):** ________________

**Instrucciones Post operativas y o medicamentos (post-op instructions and/or medications):**

__________________________

Student Signature

__________________________

Faculty Signature

---

### Terapia Física (PT notes) Sección:
**Mobilidad del Paciente (Patient mobility):**

<table>
<thead>
<tr>
<th>Asistencia (Assistance):</th>
<th>Silla de Raedas (Wheel Chair)</th>
<th>Andador (Walker)</th>
<th>Baston (Cane)</th>
<th>Sin aparato</th>
<th>Otro (Other)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ninguno (None)</td>
<td>100% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimo (Min)</td>
<td>20% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderado (Mod)</td>
<td>50% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximo (Max)</td>
<td>75% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependiente (dependent)</td>
<td>100% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Traslado (Transfer):**

<table>
<thead>
<tr>
<th>Caminar (Walking)</th>
<th>100% of the time</th>
<th>75% of the time</th>
<th>50% of the time</th>
<th>25% of the time</th>
<th>0% of the time</th>
</tr>
</thead>
</table>

### Terapia Ocupacional (OT notes) Sección:

**Asistencia (Assistance):**

<table>
<thead>
<tr>
<th>Funcion (Function)</th>
<th>Si</th>
<th>No</th>
<th>Dolor</th>
<th>Comunicación (Communication)</th>
<th>Verbal</th>
<th>Escrito</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puede lavarse el pelo?</td>
<td>Yes</td>
<td>No</td>
<td>Pain</td>
<td>Verbal</td>
<td>Written</td>
<td></td>
</tr>
<tr>
<td>Puede cepillarse los dientes?</td>
<td>Yes</td>
<td>No</td>
<td>Pain</td>
<td>Visión</td>
<td>Anteojos</td>
<td></td>
</tr>
<tr>
<td>Puede abrir envases pequeños?</td>
<td>Yes</td>
<td>No</td>
<td>Pain</td>
<td>Orientación</td>
<td>Hora</td>
<td></td>
</tr>
<tr>
<td>Con frecuencia le caen cosas con facilidad?</td>
<td>Yes</td>
<td>No</td>
<td>Pain</td>
<td>Audición</td>
<td>Oído</td>
<td></td>
</tr>
<tr>
<td>Es decir, es difícil usar las manos?</td>
<td>Yes</td>
<td>No</td>
<td>Pain</td>
<td>Instrucciones</td>
<td>1 paso</td>
<td></td>
</tr>
<tr>
<td>Mano Predominio?</td>
<td>Izquierda</td>
<td>Derecho</td>
<td></td>
<td>Memoria</td>
<td>Inmediato</td>
<td></td>
</tr>
</tbody>
</table>

**Memoria**
- Inmediato
- 3 minutos
- Largo plazo

---

### Notas de Farmacia (Pharmacy notes):

<table>
<thead>
<tr>
<th>Nombre del medicamento, dosis, frecuencia</th>
<th>Indicación</th>
<th>Comentarios/Recomendaciones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug name, dose, frequency</td>
<td>Indication</td>
<td>Comments/Recommendations</td>
</tr>
</tbody>
</table>

---


### NOMBRE DEL RESIDENTE:

### FECHA:

### FECHA DE NACIMIENTO:

### EDAD:

### PERFIL OCUPACIONAL

**¿Cuánto tiempo lleva en este hogar?**
How long have you lived in this home?

**¿Cómo es un día típico para usted?**
What is a typical day like for you?

### Participación Social

**¿Con quién se socializa en el hogar? ¿Tiene amigos(as) aquí?**
Who do you socialize with here at the home? Do you have friends here?

**¿Tiene familia que viene a visitarte?**
Do you have family that comes to visit you?

**Trabajo**

**¿Ayuda con los quehaceres en el Hogar?**
Do you help out with any chores around the home?

### Educación

**¿Asistió a la escuela?**
Did you attend school?

**¿Cuál fue el grado último que completó?** (¿Cuál fue el último grado que completó?)
What was the last grade you completed?

### El Tiempo Libre

**¿Tiene aficiones/pasatiempos?**
Do you have any hobbies? Are you able to still do them?

**¿Cuáles son las actividades en que participa o que disfruta usted?**
What activities do you participate in or enjoy doing?

- [ ] Pasar tiempo con otros (spend time with others)
- [ ] Baile (Dance)
- [ ] La artesanía (ceramics)
- [ ] Asistir a la iglesia/misa (attend church/mass)
- [ ] La música (music)
- [ ] Los juegos de cartas (card games)

**¿Se siente aburrido(a) con frecuencia?**
Do you feel bored frequently?

### Sueño y Descanso

**¿Tiene problemas para dormir en la noche? ¿Por qué?**
Do you have difficulty sleeping at night? Why?

### PERFIL PERSONAL

**Funciones Mentales**

**Escribe las observaciones**

**¿Tiene problemas para recordar cosas?**
Do you have difficulty remembering things?

- [ ] Sí
- [ ] No

**En caso afirmativo, ¿Cuáles son los problemas de su memoria?**
If yes, what things are difficult to remember?

**Residente está orientado a:**
- [ ] Persona
- [ ] Lugar
- [ ] País
- [ ] Ciudad
- [ ] Otro

**Residente es orientado a:**
- [ ] Persona
- [ ] Lugar
- [ ] País
- [ ] Ciudad
- [ ] Otro
**Función Sensorial**

**Escribe los observaciones** Record observations:

<table>
<thead>
<tr>
<th>¿Tiene problemas de la vista?</th>
<th>Si</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>¿Usa anteojos?</td>
<td>Si</td>
<td>No</td>
</tr>
<tr>
<td>¿Tiene usted problemas para escuchar?</td>
<td>Si</td>
<td>No</td>
</tr>
<tr>
<td>¿Con frecuencia le caen cosas con facilidad? Es decir, es difícil usar las manos?</td>
<td>Si</td>
<td>No</td>
</tr>
</tbody>
</table>

**Dolor**

**Escribe los observaciones** Record observations:

<table>
<thead>
<tr>
<th>¿Tiene usted dolor, entumecimiento, u hormigueo? ¿Dónde?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>¿A qué hora del día experimenta más dolor?</td>
<td>En la mañana (morning)</td>
</tr>
<tr>
<td>¿Hay algo que le quita el dolor o que lo hace mejor o peor?</td>
<td></td>
</tr>
<tr>
<td>¿Hay cosas que no puede hacer ahora que le gustaría hacer, pero está limitado por el dolor o una condición médica?</td>
<td>Si</td>
</tr>
</tbody>
</table>

**Movilidad**

**Escribe los observaciones** Record observations:

| ¿Necesita descansar al caminar o cuando empuja su silla de ruedas en distancias cortas? | Si | No |
| ¿Es usted capaz de levantarse y sentarse por sí mismo/a? | Si | No |
| ¿Se ha mareado alguna vez? | Si | No |
| ¿Se ha caído o ha estado a punto de caerse? | Si | No |
| ¿Usa un bastón o andariviel o una silla de ruedas? |  |

**Actividades de la Vida Diaria & Función**

<table>
<thead>
<tr>
<th></th>
<th>Ninguno (None)</th>
<th>Mínimo (Min.)</th>
<th>Moderado (Mod.)</th>
<th>Máximo (Max.)</th>
<th>Dependiente (Dependent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bañarse</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Vestir</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Ir al baño</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Comer</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Alimentación</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Movilidad funcional</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
<tr>
<td>Aseo personal</td>
<td>0% of the time</td>
<td>25% of the time</td>
<td>50% of the time</td>
<td>75% of the time</td>
<td>100% of the time</td>
</tr>
</tbody>
</table>

**Recomendaciones** (Recommendations)

Consulte la información adjuntada (See Attached Information on):

- Visión
- Audición
- Memoria
- Debilidad
- Movilidad
- Dolor
### Actividades

**Descripción de la Actividad:**

**Asistencia Necesaria:**

<table>
<thead>
<tr>
<th>Nombre:</th>
<th>Independiente</th>
<th>Mínimo</th>
<th>Moderado</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hogars

- Health Status of Nicaraguan Elders & Nicaraguan Map
- Granada Hogar
  - Hogar Name
  - Location
  - Rough Layout
  - Number of Residents
  - Typical Conditions seen
  - The Social Environment:
    - Cooperation of Nuns
    - Volunteers
    - Events
    - Special rules you had to follow
- Estelí Hogar
  - Hogar Name
  - Location
  - Rough Layout
  - Number of Residents
  - Typical Conditions seen
  - The social environment:
    - Cooperation of Nuns
    - Volunteers
    - Events
    - Special rules you had to follow
- Masaya Hogar
  - Needs Assessment
  - General Layout

This information was compiled to aid understanding of specific hogars. Information was collected by students whom had worked at the listed hogar. Hogar information is subject to change. If you are visiting an hogar which is not on this list, please add the hogar name and the necessary information. This helps better prepare you for the student journey.
La Providencia Hogar de Ancianos located in Granada
Number of Residents: 30-50

TYPICAL CONDITIONS:
- Dx: deconditioning, diabetes, vision difficulties, arthritis, sores, dementia.
- Physical location conditions: Building in need of repair, uneven surfaces, make-shift wheelchairs, open air rooms, residents in need of clean up (bowel and bladder), lack of water, rusty surfaces.

SOCIAL ENVIRONMENT:
- **Cooperation of Nuns:** The nuns at this particular hogar were in support of the presence of the program, but there was limited engagement. There was a hierarchy of work responsibilities among the nuns and caregivers. The caregivers demonstrated more involvement in the daily activities planned by the students and more interest in the training. The nuns are protective of the materials they do have control over (i.e. radio). With that, make sure that you request the stereo far ahead of when it is actually needed to ensure you will be able to obtain it from the locked office.
- **Volunteers:** Family members are the most frequent volunteers in the facility, who assist in the hair combing/cutting of the gentlemen, meals (serving and assisting residents), general cleaning or handiwork, and special attention cares for his mom (the eldest in the facility in 2011).
- **Events:** There are random weekends when groups from the community would come with provisions for parties or church events. These are not consistent. Another leisure opportunity that is to be provided is a band that comes and plays music for the residents on Fridays, although we were made aware that this does not happen on a regular basis nor had it happen in several weeks before our arrival.

**NOTE:** Be sure that you follow rules set forth by the nun administrators.
1. Women, do not get too close to the men. Men are willing to hug and enjoy having a woman close when dancing. The nuns prefer dancing that occurs at arm’s length apart.
2. Due to the inability to clean at all times (mainly from the poor ratio of caregivers to residents), do not sit on the floors at any time. This includes speaking with the residents or resting during breaks.
Hogar de Ancianos Club Santa Lucia - Estelí, Nicaragua
Number of residents 31-39 residents

TYPICAL CONDITIONS
- Diagnoses and common conditions
  - Mental health conditions including depression
  - History of CVA, and fractures
  - Wheelchair use due to history of polio
- Physical location conditions: Paved walkways and tiled walkways are present. Tiled areas smooth and possibly slippery when wet. Steps and raised transitional areas between surfaces are present. Paved walkways are not always flat, and may pose as a difficulty for wheelchair users.

SOCIAL ENVIRONMENT
- Cooperation of the Hermanas/Nuns
  - Involved with the care of the residents.
  - Interested in learning more about what they can do to benefit the hogar and the residents.
  - Participated during fiesta activities.
  - Willing to share information about the residents to the Pacific CHP team to provide better care.
- Volunteers and the Community
  - Community members visited to socialize and spend time with the residents
  - Church was open to use of people in the community.
- Rules
  - Residents were not allowed to have their own soaps and other toiletries in their individual possession due to safety concerns.
  - Residents not allowed to independently have candy from the piñata.
  - Everything donated is shared - caregivers cannot have gifts.
  - No crafts are allowed to be taken to the resident’s rooms due to safety concerns of residents eating them.
Educational Information

- **Human Body, The Effects on Aging, & Adaptation Tips**
  - This information is good to review prior to your departure; it will help you understand what possible conditions the residents may be struggling with.

- **Energy Conservation**
  - This information is good to review prior to your departure; it will help you to remember possible adaptations or considerations for residents who may be physically declining.

- **Transferring**
  - Safe patient handling documentation provided by *PARC* (Providence Acute Rehabilitation Center)

- **PALS assessment**
  - This can potentially be used to supplement intake information.

This information was compiled to help you review common conditions in elderly clients. Many of the residents within the hogar are deconditioned and may be struggling to perform self-care tasks.
Previous Interventions

You will be expected to lead multiple leisure exploration groups for the elders to help them engage socially and physically as well as foster their independence in creating something for themselves. The following information contains all of the activity groups run by OT students since the beginning of the program.
Painting

**Purpose of Activity:** To engage in a sensory and social experience while building fine and gross motor function
- Upper body exercise
- Hand-eye coordination
- Gross and fine motor functioning of hands and arms

**Materials/Supplies Required:**
- Paint brushes of varying sizes (bristles and width of handles)
- Foam brushes
- Standard or foam paper (Plastic sheets for stained glass windows)
- Paint pallets to disperse paint
- Water cups to wash brushes
- Tables (preferably varying heights to allow for wheelchairs to fit underneath)
- Chairs
- Crayons (If participants are not able to paint)

**Space Requirements:** Space with room for tables, chairs and wheelchairs. Adequate lighting for participants to see the activity. Flat work surface.

**Directions (sequence of activity):**
1. Set up the table with paint, brushes, water and paper in the middle of the table so that participants are encouraged to share.
2. Allow participants to choose their seat.
3. Instruct participants to paint what they choose on their paper.
4. Encourage participants to communicate with other members during the activity

**Adaptations/Variations:**
1. To decrease the challenge, allow participants to use crayons or markers if they have difficulty holding a paint brush.
2. For participants with low vision, allow them to finger paint or use a foam brush.
3. Visual impairments: Use high contrast paint colors. Instead of using flat paper, substitute with raised foam or different textured paper.
4. For participants with limited upper extremity mobility use hand over hand instruction ie. help the participant hold the brush, aid with shoulder movement or hand/wrist movement.
5. For participants who struggle with deciding what to paint, offer examples or provide a template to paint.
**Dancing**

**Purpose of Activity:** To promote leisure exploration, community participation and to build endurance.
- Upper body exercise using both arms
- Gross motor functioning of hands and arms
- Lower body standing endurance

**Materials/Supplies Required:**
- Stereo/CD player for music
- CD with music of your choosing

**Space Requirements:** Large area preferably on a flat surface and free of excess furniture

**Directions (sequence of activity):**
1. Start playing music on stereo or computer (any style music can be played).
2. Instruct the participants that they should feel free to dance to the music.

**Adaptations/Variations:**
1. Limited Endurance/unable to stand: the participants may sit in chairs or wheelchairs and participate with arm movements. For example, the facilitator can hold hands with the participant and move arms to the music.
2. Limited Balance: Facilitator can assist participant by holding their hands while dancing. If there is a bar or chair with a back available, instruct participant to hold on while dancing. The participant can sit to dance and participate by dancing with his/her arms.
4. Cognitive Disabilities: Provide a visual demonstration for participants to follow or provide kinesthetic assistance to aid the participant in moving his/her body.
Bowling

**Purpose of Activity:** To strengthen the body, increase balance, and engage in social activities.

- Upper body exercise
- Lower body exercise
- Balance
- Hand-eye coordination

**Materials/Supplies Required:**
- Bowling pins: 6-10 pins.
  - Can substitute with empty 500mL water bottles, filled 1/3 of the bottle with dirt.
- Bowling balls
  - one small 5-inch rubber playground ball
  - one large 8.5-inch rubber playground ball

**Space Requirements:**
Large room with level ground, big enough to set up own bowling lane that is free of furniture. Area must be well lit, without sun glare.

**Directions (sequence of activity):**
1. Set up bowling pins
2. Select appropriate size ball for the participant based on their needs
   - Larger ball for participants with limited gross motor control.
   - Smaller ball for participants with greater gross motor control.
3. Have participant stand 10 feet away from the bowling pins with feet hip width apart to promote balance.
4. Instruct participant to bend at the hips and roll the ball towards the pins.
5. Repeat until all pins are knocked down.
6. Encourage participants waiting to bowl to cheer on the bowler.

**Adaptations/Variations:**

1. **Limited ROM in upper body:** a piece of adaptive equipment that resembles a ramp can steer the bowling ball down the lane instead of using one’s arms.
2. **Limited use of lower extremities:** participant may sit in a chair.
3. **Limited strength:** have balls varying in weight and size.
4. Allow participants to use both hands to roll the ball if they cannot control the ball with one hand.
5. For participants with low vision, use high contrast painted pins.
6. For participants with limited upper extremity mobility use hand over hand instruction.
   - Place participant’s hands on ball with hand support from assistant on top of the participants’ hands.
7. **Decrease/increase challenge**
   - Decreased challenge: set-up 3-6 bowling pins
b. Increased challenge: set-up 10 bowling pins

**Balloon Toss**

**Purpose of Activity:** To engage in a sensory and social activity, work on hand eye coordination, bilateral upper extremity movement and exercise core strength.  
- Upper body exercise using one or two arms  
- Hand-eye coordination  
- Gross motor functioning of hands and arms

**Materials/Supplies Required:**  
- Large multi-color balloons  
- Chairs for participants who need to sit

**Space Requirements:** Large area preferably on a flat surface and free of excess furniture.  

**Directions (sequence of activity):**  
7. Blow up balloons  
8. Participants sit or stand facing each other, provide chairs as needed  
9. Toss balloon to participant using their name to alert them to the game  
10. Instruct the client to hit the balloon to keep it from hitting the ground  
11. Encourage participants to communicate with other members and continue the toss game by keeping the balloon off the ground  
12. When the balloon hits the ground, facilitator can pick up the balloon and begin the game again.

**Adaptations/Variations:**  
10. For participants with low vision, allow them to begin the game holding the balloon and toss it up to the other participants. If this is still too difficult, facilitator can hold the balloon and place the participants hand on the balloon assisting them when hitting it into the air. Use high contrast balloons.  
11. Limited Endurance/unable to stand: the participants may sit in chairs or wheelchairs  
12. For participants with limited/no upper extremity mobility, allow them to kick the balloon
Morning Exercise Group

Purpose of Activity:
To engage in social participation, develop daily morning routines, and facilitate maintenance of physical disposition to increase independence and stability for movement.
- Increase coordination and balance & Maintain/prevent physical decline.
- Challenge cognition for direction following with visual and verbal representation.

Materials/Supplies Required (Per participant):
1 Chair if required by participant

Space Requirements:
- Each participant will need enough room to spread their arms wide and a ceiling high enough to reach upwards.

Directions (sequence of activity):
1. Set the tone for relaxation, sit or stand with your participants, breath slowly, and then calmly speak.
   a. Breath in slowly, breath out slowly- take long breaths. (x3)
   b. Raise your arms slowly in front of you, over head & back down. (x5)
   c. Raise your arms slowly to the side of you, over head & back down (x5)
   d. Raise your right arm to the side of you and place your hand on top of your head, tilt your right ear to your right shoulder. (hold for 5 seconds x 2)
   e. Raise your left arm to the side of you and place your hand on top of your head, tilt your left ear to your right shoulder. (hold for 5 seconds x 2)
   f. Roll your head forward, to the left, back, then to the right slowly (x2)
   g. Reverse directions Roll your head forward to the right, back, left (x2)
   h. Place your hands on your knees
      i. Place your left foot in front of you, and your right foot behind you
         1. Lean forward as if you are picking something up from the ground, then return to sitting position.
      ii. Place your right foot in front of you, and your left foot behind you
         1. Lean forward as if you are picking something up from the ground, then return to sitting position.
   i. Place your hands on your hips, lean forward, to the right, back, and to the left. (x2)
   j. Reverse directions, lean forward, to the left, back, and to the right. (x2)
   k. Breath in slowly, breath out slowly- Take long deep breaths (x2)

Adaptions/Variations:
1. Increase physical challenge: Increase amount of times items are performed, use weights, or bend to floor.
2. Visual impairment: Ensure amplified voice, quiet space, or hand over hand demonstration.
3. Auditory impairment: Ensure all participants are able to see front of room for visual demonstration. Provide large print handouts or hang signs to demonstrate movements.
Necklace Beading

Purpose of Activity:
To engage in a leisure activity while using cognitive and fine motor skills.
- Bilateral eye hand coordination.
- Motor processing and sequencing of multistep directions.
- Fine motor skills.

Materials/Supplies Required (all of these are used for one large batch to share):
1-2 Bag of multi-color large beads   1 Roll of scotch or masking tape
1 Skein of yarn     1 Bag of pipe cleaners
1 pair of scissors for each set of three participants 1 example of beaded necklace.
Small bowls to hold beads, one per 2 participants

Space Requirements:
- Large table with space for chairs and wheelchairs.
- Enough space on the table to spread out materials and have a small working space for each participant.
- Adequate lighting by either natural or artificial means.

Directions (sequence of activity):
2. Place beads in multiple small bowls (mixed together), bowls placed in middle of table, one between each participant sitting across from each other.
3. Give one participant the skein of yarn and scissors to cut length of yarn participant desires, then pass along to other participants.
4. Show each participant beaded necklace example, then place in center of table.
5. Have participants tie knot at end of string large enough that bead will not pass over.
6. Allow each resident to choose colors desired, and place bead on necklace one by one.
7. When resident has completed beading, demonstrate tying loop knot, which will hold knot of other side of string.

Adaptions/Variations:

4. Decreased fine motor pinch grip: Pre tie knots, use pipe cleaner instead of yarn if difficulty with holding yarn to bead, tape end of string to increase strength/stability, tape knot end of string onto table to decrease demand of holding string.
5. Limited cognitive ability: Break down task into single step instructions; pre cut string and pre knot end of string, separate beads in fewer colors to assist in limiting choice of bead color.
6. Visual impairment: Use pipe cleaners to increase tactile sensation, place beads close to participant, practice location of beads and pipe cleaners to allow familiarity with environment, if color choices are desired- separate beads into various locations dependent on color and allow extra time for exploring environment and development of familiarity.
Walker Bags & Purses

Purpose of Activity:
To engage in social participation and to create a product to promote independence and safety while walking.
- bilateral eye-hand coordination.
- Motor processing and sequencing of multistep directions.
- Fine motor skills.
- Interaction among participants in the community.

Materials/Supplies Required (Per participant):
1 (12”x24”) strip of fabric
1 Sewing Needle
1 Spool of thread/string
1 Spool of Ribbon
1 Pair of scissors
1 Fabric Marker
1 Bottle of Fabric glue (To be shared)

Space Requirements:
- Large table with space for chairs and wheelchairs.
- Enough space on the table to spread out materials and have a small working space for each participant.
- Adequate lighting by either natural or artificial means.

Directions (sequence of activity):
8. Fold 12” x 24” strip of fabric in half, place fold at bottom with open slats at sides and top.
9. Use fabric marker to place dots up left and right side of bag, 1 cm apart. At top of bag, place two dots 1” below opening of bag, on left and right side.
10. Cut 18” of string, tie knot at end of string, and thread into needle.
11. Using fabric dots, begin at bottom of bag, push needle through dot and pull through other side, perform whip stitch bringing needle back around to front of bag and pushing into next hole. Continue until you reach the top of bag. At top of bag, tie off string to prevent unraveling.
12. Use scissors to make two holes at top of bag (an inch from the top of the bag and side of the bag) - fold fabric at fabric marker hold, and cut out hole with scissors.
13. Cut ribbon for desired length- two four inch pieces for bag and one 30 inch piece for purse. (Length of pieces for purses may vary due to the size of the person.)

Adaptions/Variations:
7. Limited cognitive ability: Break down task into single step instructions, pre cut string and pre knot end of string, also could use fabric glue to substitute need for sewing dependant on cognition.
8. Visual impairment: Use larger dark dots for sewing markers, use larger needles and thread, use fabric glue to substitute for sewing, place textured fabric at front of bag to allow for discrimination of front and back.
Final Notes:

- As you continue this project, please provide updated information to future students.

- This binder was created as a “quick reference” to help students receive the necessary information to aid transition prior to the Nicaragua departure.

If you would like more information regarding the project and what each year completed, please refer to the Pacific University CommonKnowledge website or the Innovative Practice project binders archived in the Pacific School of OT for the corresponding year of which you are interested.
Presentations

Student Presentation Slides:
Pacific Nicaragua Project
Presented 03/16/12

Project Description

The College of Health Professions (CHP) offers an interdisciplinary travel opportunity to Nicaragua for students and faculty to provide health-related services for Nicaraguan elders in partnership with the Jessie F. Richardson Foundation (JFR).

Cities of Service

Map of Nicaragua (Image source: http://www.xe.com/currency converter/)

Health Status of Nicaraguan Elders

- The majority of healthcare in Nicaragua is focused on children and adolescents.
- Recent shifts are bringing more attention to the aging elder population.
- 90% of the elderly population receive no social security benefits.

- Common health concerns for Nicaraguan elders:
  - Diabetes
  - Chronic pain
  - Poor mobility
  - Gum disease
  - Poor vision
  - Heart disease
  - Depression
  - Lack of access to medications

Interdisciplinary Team

- Dr. Milton Lopez, Nicaraguan Gerontologist
- 1 JFR team leader
  - 8 faculty/clinical instructors
    - 2 OT, 2 PT, 2 Dilla, 1 PH, 1 PA
- 18 CHP students
  - 4 Occupational Therapy
  - 4 Physical Therapy
  - 2 Dental Hygiene
  - 4 Physician Assistant
  - 4 Pharmacy

Before Nicaragua

- Spanish classes
- Fundraising
- Mandatory interdisciplinary orientation meetings
- Preparing supplies
- Student presentations about Nicaragua
- Packing gift bags
- Reading up on Nicaragua

Interdisciplinary Teams work with Nicaraguan elders for approximately 10 days in the hogars.

Hogars are care centers that house elders whose families are no longer able to care for them due to various circumstances.
Occupational Therapy
- Assessed and provided interventions related to ADLs and IADLs.
- Addressed client-centered leisure activities and social needs.
- Provided caregiver education.
- Co-led exercise and activity groups with PT students.
- Networked and engaged with community members on various methods for community involvement.

Physical Therapy
- Gait-training and strengthening exercises
- Mobility screenings
- Provided caregiver education
- Co-led exercise and activity groups with PT students
- Networked and engaged with community members on various methods for community involvement

Dental Hygiene
- Provided education to residents and caregivers regarding dental health.
- Organized clinics that included cleaning and extractions as needed.

Pharmacy
- Conducted medication screenings including:
  - Initial recommendations
  - Alternative medications
  - Medication organization
- Medication review and organization
- Reviewed current medication supply, storage conditions, and expiration dating.

Physician Assistant
- Reviewed charts
- Physical screening exams
- Wound care
- Ear lavages
- Diabetic foot care

Interdisciplinary Team
Community Involvement

- Meetings with the Vice Mayor of Granada
- Meetings with community leaders within Estelí
- Nicaragua nursing students from UNAN – Managua assisted with interprofessional process of screening clients for needed services.

Balance: Work and Play!

- Cigar factory tour
- Downtown Granada (chocolate shop, art gallery)
- Mira Flora Nature Reserve
- Masaya Market
- Futbol game
- Estelí Rodeo

After Nicaragua

- Updated Pacific Nicaragua website
- Created “quick reference” Nicaragua project binder for future OT Nicaragua students
- Created 2011 Nicaragua IPP binder
- Literature review for use in community power point presentation
- Nicaragua power point for presentation to 1st year OT students

Nicaragua!

Trip Cost

- Approximately $1,600 - $1,800 includes:
  - Orientation sessions
  - Faculty supervision
  - In-country preceptor and consult
  - Hotel
  - Meals
  - In-country transportation (private shuttle/driver)
  - One-time Spanish lesson
  - Supplies

Additional Costs

- Airfare
- Passport/visa
- Immunizations
- Spending money
- Specialty items to prepare for trip (camera, medications, etc.)

¿PREGUNTAS?
Community Presentation Slides:
Cross Professional Team Work: How does it work?
Presented 04/03/12

Presentation Outline
- Description of the Pacific University, interdisciplinary health trip to Nicaragua, December 2011
- Developing a team
  - Steps involved in team building
  - Nicaragua team building
  - Suggested improvements
- Defining the team
  - Defining team organization
  - Defining the Nicaragua team
  - Suggested improvements
- Benefits of cross-professional teamwork
  - Benefits to the clients, providers, and the organization.
  - Benefits of the Nicaragua trip
- Student Education Methods
  - The preferred educational environment.
  - The student benefits of the Nicaragua trip.

NICARAGUA 2011
- Goal: Provide health care to abandoned sisters living in Higueras within Nicaragua
- Jessica F. Richardson Foundation
- Team: 18 students 9 faculty
- Hernanias & Caregivers
- Two Sites:
  - Granada
  - About 50 residents
  - Estelí
  - About 30 residents

Objectives
By the end of this presentation you will be able to:
- Identify how to develop a team
- Identify the type of teams you can develop
- Identify the benefits to developing cross-professional teams
- Identify methods for educating students on cross professional teamwork and the benefits to the student learning.
Future Ideas for Nicaragua Team Development

Teamwork:
The combined action of a group, especially if it is effective and efficient.
- Cross-professional team work:
  - Individuals from different disciplines working in a team toward a common goal (Thyebert et al., 2005).
  - To further define this team it requires a more in-depth look
  - Organization of the team
  - Team goal
  - Professional roles
  - Client roles
  - Assessment
  - Communication styles

Defining Your Team:

- Undisciplinary:
  - Team members feel no need for cooperation with other members. They are co-located & their goals are defined by their major organization. Minimal client role.
- Interdisciplinary:
  - They are co-located & their goals are defined by their major organization. Occasional communication between professions not formally organized. Minimal client roles.
- Multidisciplinary:
  - Professionals work within the boundaries of their own profession, patient is formally discussed but often there is a lack of understanding of the roles and tasks of the other professionals. The role of the client is minimal.
- Transdisciplinary:
  - Team members are willing to share knowledge, trust each other’s judgments, and are influenced by each other’s making decisions. Client centered aspect is that overall goal setting between professionals and the client is possible.

Nicaragua 2011

- Nice 2011 met the criteria of cross-professional teamwork:
  - Multiple disciplines prepared for the trip.
  - Dental Health, Physician Assistant, Physical Therapy, Pharmacy, and Occupational Therapy.
  - A common goal was defined to provide health care for abandoned children in Nicaragua.
- The Nice 2011 team:
  - An Interdisciplinary Team:
    - Students were co-located as they performed treatments within the clinic.
    - The overarching goal was defined by the faculty of Pacific University.
    - Communication between the students was not formally organized, however students did communicate as they deemed necessary.
    - Minimal client role.
  - A Shift from Inter-disciplinary to Trans-disciplinary:
    - Students were colocated as the performed treatments within the clinic.
    - Goal setting was established by the faculty of Pacific University.
    - Communication between the students was influenced by each other’s making decisions.
    - Client centered aspect is that overall goal setting between professionals and the client is possible.

Ideas Improvements for future Nicaragua groups

- Rising the slack from Inter-disciplinary to Trans-disciplinary:
  - Students were colocated as they performed treatments within the clinic.
  - Goal setting was established by the faculty of Pacific University.
  - Communication between the students was influenced by each other’s making decisions.
  - Client centered aspect is that overall goal setting between professionals and the client is possible.
Benefits of the Client

- McClellan (2006) suggests that patient satisfaction rates rise when patients are treated by teams, as opposed to a solo practitioner, as the continuity of care is greater in an interdisciplinary team environment.
- The empowerment of patients as “active partners” in care is more established to serve patients of diverse cultural backgrounds (Grant et al., 1997)
- The client is more likely to receive the correct care if the most effective and efficient care provider is able to refer to the appropriate healthcare provider.
- Faster health outcomes
- Shorter wait times
- Greater degree of patient empowerment
- Personal resources are utilized for care, such as personal monetary resources and transportation

Benefits of the Providers

- Health care professionals benefit from interdisciplinary collaboration by gaining diverse knowledge of other practitioners on the health care team and learning to problem solve with their members to reach solutions.
- “Equal distribution of workload among team members, which contributes to an increase in the practitioner satisfaction since” (Pokhrel, 2010)
- “Greater professional development and more appropriate use of innovation skills, providing evidence-based and mental reports, and promoting moral empowerment of individual specialists” (Newfoundland and Labrador Association of Social Workers, 2011)

Benefits of the Facilities

- It is reasonable to expect that interdisciplinary care for the elderly could prove more cost-effective by reducing the associated costs of care, improving their quality and enhancing overall patient outcomes. The use of an interdisciplinary team would enable the facility to manage their health and dignity carefully, thus reducing hospitalization and related medical resources could be reduced (Bishai et al., 2005).
- Collaboration is well coordinated to facilitate multidisciplinary and cost-effective care, with stress towards health promotion.
- Facilities quality improvement efforts.
- Satisfied patients return provide or use of services, increasing members for revenues.

Interdisciplinary Education Methods

- Team-based primary care offers the potential to dramatically improve the quality and efficiency of care, but its broader adoption is hindered by an education system that trains health professionals in silos.” Schuetz, White, and Savett (2010)
Service Learning in Rural Areas

- Interdisciplinary service learning in rural areas facilitates
- Student learning
- Appreciation of other team member roles
- Understanding of other healthcare team member roles
- This method provides a more effective understanding of roles when compared to practice in urban settings.

Timing of Education

- Shared learning at an early stage facilitates interdisciplinary collaboration.
- Early-stage learning better facilitates interdisciplinary collaboration.
- Individuals need to be secure with their own competency in their discipline.
- Education courses near the end of one’s educational program supports students’ security and identity within their own discipline.
- This supports senior students or postgraduate students engaging in interdisciplinary learning classes.

Student Benefits from Nicaragua Trip

Service learner method

- Understanding of other professional roles
- Interdisciplinary team process to create own supportive culture & environment in rural area
- Clinical interdisciplinary experiences

Recommendations

- Use of case studies (problem-based learning) during mandatory healthcare modules when possible learning methods are available.
- Pacific University College of Health Professions first-year students are required to take a course focusing on interprofessional teamwork.
- Pacific University organizes interdisciplinary case conferences for College of Health Professions students to attend and collaborate with other students.
- Interprofessional courses focused on service learner methodology.
- Pacific University’s Diabetes Clinic engages multiple disciplines to provide care to the local community.
- Structured time for interdisciplinary discussions regarding diagnoses, clients, and cases.