INTRODUCTION

The Adult Outpatient Seating Clinic at the Health Sciences Centre in Winnipeg, Manitoba has adapted and implemented a “SMART” goal setting tool to set objective and client-centered goals. Health Sciences Centre is one of the largest health care facilities in Canada with over 800 beds and a staff of 6000, servicing complex care clients throughout Manitoba, Northwestern Ontario and Nunavut.

The Health Sciences Centre Seating Clinic has been a service provided by the Occupational Therapy Department for over ten years and is managed by two Occupational Therapists at a 0.3 EFT. Vendors, physicians, rehab engineers and other rehab professionals are consulted, as needed. Admission criteria include clients with complex seating needs which cannot be met by existing community resources.

HISTORY

Prior to using “SMART” goal setting, the Occupational Therapists encountered several difficulties which tended to make the Seating Clinic inefficient and time consuming. Discharge planning was often very difficult. Goals were previously unclear causing clients to remain on the caseload indefinitely. Clients continued to express one concern after another and as a result, therapists had difficulty determining when discharge was appropriate. Also, significant time was spent using a trial and error process to determine the best seating products. Client complaints were very subjective. For example, a common complaint was of a wheelchair being “uncomfortable” or “not fitting right.” Client goals were frequently unfocused or non-specific. Often clients were unable to determine what they wanted to achieve from a “better” seating system. Besides being non-specific, client expectations were unrealistic or not achievable. For example a client may have wanted to sit in his/her wheelchair for 12 hours a day, when his/her tolerance was currently one to two hours per day. Communication was often poor or inconsistent between therapists. Seating plans and intervention progress were difficult to communicate between new therapists coming onto Seating Clinic or between Seating Clinic therapists and a client’s community therapist, caregiver or vendor. Goals were often therapist driven versus client driven. They were generally written without involvement of the client and with terminology that suited the therapist. Therefore clients frequently did not feel invested in the process. Finally, there was no means of measuring the effects of seating interventions prior to discharge or knowing if seating gains had been maintained following discharge.

The idea of using “SMART” goals for our Seating Clinic arose as a suggestion from our Outcome Measures Clinical Specialist, who wanted to ensure appropriate measurement of the Seating Clinic program. She recommended the use of “SMART” charting which was being successfully used by our occupational therapy colleagues at the Children’s Hospital as a technique to set functional and measurable goals with their pediatric outpatient clientele. An extensive literature search could not identify further information on the source of “SMART” goals and the use of these goals in therapeutic settings.

DEFINITION

The acronym “SMART” stands for Specific, Measurable, Attainable, Relevant and Time Related. SMART goals are written from the client’s perspective, using language that is understandable to the client. Examples of how to use this acronym clinically in a seating situation are as follows:

$ = Specific
Ask yourself the questions, “who, what, when, where and how?”
For example, instead of... “I want to still be able to get in and out of my wheelchair by myself”
Use… “I will maintain the ability to independently use a standing pivot transfer from my wheelchair to bed, toilet and car immediately after receiving my new wheelchair.”
M = Measurable
Ask yourself the question, “How can I measure this complaint or issue?”
For example, instead of...“I want less pain”
Use...“My pain will decrease from 5 to 3 on the pain scale” or
Use...“I will be able to sit for 6 hours rather than my current 3 hours” or
Use...“I will require repositioning once per shift rather than the current 5-6 times per shift”

A = Attainable (realistic)
Ask yourself the question, “Are the client’s goals too difficult to be met, considering their physical, cognitive, social and environmental barriers?”
For example, for a client with Multiple Sclerosis,
Instead of...“I want to always transfer by myself out of my wheelchair, like I am doing now.”
Use...“I will be able to transfer out of my wheelchair without the use of a mechanical lift until the end of next month (ie. October 1999).”

R = Relevant
Ask yourself the question, “Is this goal meaningful to the client?”
For example, instead of...“Decrease neck flexion so that neck is positioned in neutral flexion/extension.”
Use...“I will be able to hold my head up so that I can eat and swallow for all of my meals”

T = Time Related
Ask yourself the question, “What kind of time frame should be used?”
For example, instead of...“I want to be able to drive my new power wheelchair”
Use...“I will be able to drive my new power wheelchair to the store without supervision after having practiced for two weeks.”

PROCESS
SMART goals are determined with each client during his or her initial assessment. The three-hour initial assessment begins with an interview with the client and/or caregivers, discussing their concerns with the current seating system and their related functional skills/needs. Following the interview, a physical assessment is completed with the client in his/her wheelchair, sitting and supine on the mat and a final review of his/her present seating system.

When the assessment is completed, the therapists take approximately 30 minutes on their own to discuss seating issues, intervention options and to structure client functional goals into possible SMART goals. Seating issues, recommendations and SMART goals are then reviewed and modified with the client.

Once the client has determined his/her SMART goals, a vendor is chosen, equipment is ordered, and a follow-up appointment is scheduled to assess the client with the new seating components. If these components are deemed suitable, the client trials the equipment for approximately two to three weeks. After this trial, the client returns for follow-up to review seating components and SMART goals. In cases where the client is unable to return for ongoing follow-up or if follow-up is more convenient within their own environment, community therapists, vendors and other rehab professionals are consulted. The seating issues, plan and SMART goals are shared with the other professionals to ensure consistent and accurate follow-up. If SMART goals have been met, the client is discharged from Seating Clinic. If they have not been met, the process continues and equipment is modified until SMART goals can be achieved.

Once discharge is complete, a summary sheet including client’s demographics, seating interventions and SMART goals is filled out and given to the Outcome Measures Clinical Specialist (Occupational Therapist). She then completes a telephone follow-up with the client or client’s caregivers at three, six and twelve months post-discharge to review the SMART goals to determine if they continue to be met.

To date, of the seven clients that have been followed-up, 100% of the goals were met at discharge and 84% of the goals continued to be maintained at six months.
CASE STUDY

Jim is a 30 year old gentleman living in a personal care home in Nunavut. He is diagnosed with a left hemiparesis. He is unable to verbally communicate besides nodding, shaking his head or gesturing. Jim was referred to Seating Clinic by his Occupational Therapist (O.T.) who felt that she had addressed his seating needs the best that she could with her available resources.

During his seating clinic appointment, his seating issues and potentials were discussed and are summarized in the chart below.

A physical, mat assessment in sitting and supine determined the following:
· posterior pelvic tilt – difficult to correct to neutral in a seated position
· fixed scoliosis, convex to the right
· neck ROM flexible to neutral flexion/extension
· fixed left hip external rotation to 25°
· left shoulder girdle protracted but flexible to neutral
· overall muscle relaxation and decreased tone with a tilted and reclined (65°) position
· hip ROM limited to 15° flexion on right and 90° flexion on the left, prior to eliciting a posterior pelvic tilt
· left knee contracted in full extension
· right knee ROM to 105° flexion prior to eliciting a posterior pelvic tilt
· left ankle plantar flexion fixed at 30°

SMART GOALS SUMMARY CHART

Note: Each SMART Goal may be met by one or more Plan and each Plan may be met by one or more Product, thus there is no horizontal relationship between these points on the chart.

<table>
<thead>
<tr>
<th>Seating Issues/Potentials</th>
<th>SMART Goal</th>
<th>Plan</th>
<th>Ideas/Products</th>
</tr>
</thead>
</table>
| 1. a) Unable to self-propel | 1. a) Wheelchair fits through all hallways and doorways in PCH at all times  
   b) After two months of practice, Jim is able to self-propel 100ft independently | ·Maintain trunk/neck support by providing firm back with lateral supports and head rest  
   ·Accommodate left hip ↓ ROM by ↑ seat to back angle to 25° recline and cutting out left thigh on cushion to allow 25° hip flexion  
   ·Continue use of leg trough  
   ·Maintain pelvis in neutral obliquity, rotation and posterior pelvic tilt using stable cushion  
   ·sliding in wheelchair with stable cushion, foot support, positioning belt and tilt on wheelchair  
   ·Allow self-propulsion  
   ·Tone will be reduced through provision of tilt wheelchair | ·Tall Deep U-Back  
   ·Ottobock adjustable headrest  
   ·Manual recline on wheelchair  
   ·Cut out left thigh of cushion  
   ·Modify custom leg trough to mount to new system  
   ·Positioning belt  
   ·18w x 18d Ultimate cushion  
   ·AMS tilt and recline wheelchair (18w x 18d), 16° seat to floor height |
| 2. a) Parts on wheelchair are hard to remove  
   b) Two-person standing pivot transfer must be maintained  
   c) Brakes and tilt system are faulty | 2. Immediately upon receiving wheelchair, all parts are removable so that Jim is able to transfer to/from wheelchair using standing pivot with two-person assist | |
| 3. Pain in low back, neck and left leg | 3. Jim reports his low back pain remains at 9/10, left leg at 8/10 and neck at 7/10 after sitting two hours in chair | |
| 4. Sliding forward in wheelchair | 4. Caregivers report Jim does not slide out of wheelchair at any time | |
Following review of the plan, recommendations and SMART goals with the client and his O.T., the recommended products were ordered. In Jim’s case, his funding agency would not fund a trip for him to return to Winnipeg for installation of products and assessment. It was more cost-effective for the agency to fly the vendor up North and have the products installed there. The seating modifications and plan were reviewed with the vendor and community O.T. prior to their installation using the “SMART goals summary chart” as a communication tool. The vendor was flown up North for a two and a half day period in which the equipment was installed, monitored and modified, in consultation with the community O.T.

Once final modifications were made and SMART goals were met, Jim trialled his new seating system for a three week period. Jim’s community O.T. was then contacted to review his SMART goals. During that telephone follow-up, one SMART goal (sliding out of wheelchair) was not being met and recommendations were discussed, trialled and reassessed three weeks later. At that point, Jim was no longer sliding out of his wheelchair. His community O.T. reviewed the pain scale and SMART goals with him and his care providers. According to Jim and the team, all SMART goals were being met. He was then discharged from Seating Clinic.

SUMMARY

Although extra time is needed during the initial assessment session to establish SMART goals, the therapists involved in this process have identified that there are fewer follow up appointments necessary. The SMART goals have facilitated better communication between Seating Clinic therapists, clients, vendors and community therapists. As illustrated in the case study, this process seems to have also expedited discharge. Exceptions to the success of this approach include unrealistic client goals, client’s resistance to change and medical complications.

The most exciting benefit of using SMART Goals has been their effectiveness as an outcome measure for our seating clinic!

CONCLUSION

The use of SMART goals in our seating clinic is in its early stages but is felt to be a beneficial communication tool and outcome measure. We would encourage other therapists to trial and adapt this tool as a means of ensuring client centredness and the provision of Specific, Measurable, Attainable, Relevant and Time related seating interventions.

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