



Telehealth: Changing the way Individuals Receive Healthcare

Telehealth is changing the way individuals receive healthcare. By eliminating travel time, mileage costs, and transportation barriers obtaining healthcare can be more convenient than ever. For individuals with intellectual and developmental disabilities (I/DD) it allows them to communicate with physicians/nurses that might have been inaccessible to them in the past due to lack of transportation or inaccessible buildings. The VGo project, funded through the Verizon Foundation, has supplied two chapters of The Arc with a VGo robotic device to allow them to provide telehealth care and health education to the individuals that they serve. Through VGo, chapter nurses can communicate with individuals at a day or residential program across town with the touch of a button thus being available to provide more care, guidance, and feedback to a larger number of people. VGo gives our nurses the capability to navigate the device around freely as if they were present at the location and provides them with the technology to see and interact with individuals by zooming in/out, using special lighting, and taking pictures and videos.

Throughout 2016, VGo was utilized with much success at two chapters of The Arc – The Arc Macon in Georgia and The Arc Gloucester in New Jersey. Nurses have used VGo to interact with 180 individuals (141 individuals with I/DD and 39 staff members) and saved chapter staff 104 hours by eliminating travel time between locations, thus reducing travel expenses.

VGo was used for variety of different purposes throughout its rotations at various day and residential programs, including wound care, blood pressure monitoring, providing health assessments, health education and training to individuals with I/DD and staff. While there were many uses, the following showcases specific areas where VGo has made a lasting impact on our chapters.

Improving Chronic Health Conditions

VGo was used to closely monitor an individual at a day program with a chronic cough that had grown increasing worse over time. The accessibility of VGo allowed nurses to check on him daily, which prevented him from having to make an appointment with a physician for an assessment. Several times while monitoring the individual he was observed coughing while drinking, which put him at risk for aspiration of fluids into his lungs, potentially causing Aspiration Pneumonia. The nurses decided to change his diet to help reduce potential choking or fluids entering his lungs. The individual was put on a diet of nectar-thickened liquids, which are commonly used with individuals who have issues swallowing thin liquids, such as water, milk, or soup.

While the individual was on this specific nectar-thickened liquid diet, the nurse accessed VGo to teach a cooking class that taught day program staff and participants how to make fruit smoothies with a consistency appropriate for the individual to consume. This not only helped the individual, but day program staff and participants learned about different types of healthy drink options. Gradually the individual's cough improved to the point where he no longer needed daily supervision from the nurses and he continued to enjoy eating the healthy fruit smoothies.



Wound and Abrasion Care

VGo was used in several instances to assess a number of individual's abrasions, cuts and wounds. One individual, who lived in a group home, received outpatient surgery to remove a potentially hazardous mass from his chest. Post-surgery the individual needed daily care to change the bandage and inspect the wound for signs of infection by checking for redness, swelling, tenderness and green/yellowish-colored discharge. Prior to VGo, the nurse would have to make daily visits, which took an hour roundtrip, to the day program to check on the individual, look for infection, and ensure its properly bandaged by staff. However, with VGo the nurse was able to supervise staff daily as they changed the bandage and provide guidance. The nurse had the ability to maneuver the robot around to different angles and use the lighting and zoom functions to get an even better view of the wound. These functionalities allowed the nurse to do her job from a remote location and inform staff of next steps in treatment.

This process also allowed for skill building within the staff by having them perform more hands-on care with the nurse supervising and leading them through the process with the VGo. Chapter staff are now able to properly bandage a wound and know the signs of infection to look for – both skills that will be of use with future individuals.

Health Education and Training

In addition to providing individual nursing care to individuals, VGo was used to implement health education classes to individuals with I/DD and chapter staff. VGo was placed at The Arc Gloucester's Bakery day program to help promote healthy behaviors and educate participants on healthier food options. The nurse led the group in cooking classes supervising staff and participants as they made healthy snacks including banana-nut popsicles, oatmeal bars, and fruit-infusion drinks. The mobility of the VGo allowed the nurse to move around the room and interact with individuals on a one-on-one basis to provide individual guidance.

Nurses were also able to "drop-in" during lunch time to check on the types of foods that participants brought in for lunch and provide positive reinforcement to those making improvements and eating healthier meals. Participants were eager to show off their healthy choices as VGo maneuvered around the room viewing everyone's meals. These frequent drop-ins made VGo seem like just another staff member helping out periodically throughout the day. Overtime participants looked forward to VGo visits and were eager to show-off their healthy food items and brag about their newfound knowledge learned in health education classes. The participants at the day program even gave VGo a nickname of Dr. V with chapter staff noting that participants were more attentive when receiving a health lesson through VGo as opposed to a chapter staff member.



Building Connections and Emotional Support

VGo was placed in a group residence to help monitor and support the individuals who lived there. During this rotation two of the residents, who recently underwent surgery, were temporarily residing in a rehabilitation facility to receive physical and occupational therapy to help them recover from their surgeries. While in the rehabilitation facility the individuals had very little contact with friends and staff at the group home. One day, the nurse decided to teach the health lesson to the group home residents while visiting the two individuals recovering from surgery. Using her iPad tablet she taught the class from the rehabilitation facility. This permitted the two individuals, that were isolated from peers during their recovery, to participate in the health lesson, interact with friends, and receive support and encouragement from staff at the group home. This extra encouragement was uplifting and helped motivate the individuals to stay focused on their recovery so they could return home.

Conclusion

The Arc Macon and The Arc Gloucester have discovered innovative ways to utilize VGo that go beyond the limits of just healthcare. While the majority of VGo's time was used to address individual health concerns, it was also instrumental in providing health education, training, and relationship building between peers and nurses. VGo increased productivity within our chapter nurses and expanded their reach to serve a larger number of individuals. In such a vulnerable population, telehealth empowers the individual and caregiver to become more independent, learn more about their health, and reduce physician and hospital visits while simultaneously increasing their interactions with the health professional. Telehealth is becoming a cost-effective method to help individuals with I/DD break through common barriers that have often held them back from receiving the care they deserve. It permits individuals who need more consistent monitoring to still live independently without the fear that their health will deteriorate.