

Telemedicine Use in the Pediatric Renal Transplant Population

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Problem:

Problem/Purpose: Many times, the access to care is more limited for pediatric nephrology patients due to geographic limitations of locations of pediatric programs. Pediatric patients often travel several hours each way, or into neighboring states to receive appropriate care. Our nephrology and transplant center is setting up a telemedicine program in order to decrease the frequency of visits to our transplant center, which will make receiving care more time and cost efficient for our patients and their families, and improve the patient compliance and outcomes.

Approach:

Approach: Our transplant center is partnering with our state health department and adult counterparts at a neighboring hospital (that already has a telemedicine program in place) to provide care to our pediatric renal transplant recipients that live in rural areas or who have difficulty getting to our transplant center for care. The local state health department in rural counties already have the infrastructure (equipment/trained staff) in place to support this program.

Our entire transplant staff (nephrologists, transplant coordinators, social worker, pharmacist, dietician, counselor, child life therapist) will be available and will participate in these "visits". There will be criteria in place to allow the patient to participate in the program.

Our current criteria will include that the patient must be at least 1 year post transplantation, and not have had a recent episode of rejection or other medical issues. No "early" transplant recipients will be accepted into this care model at this time. For general nephrology patients they must be established patients with stable lab work and GFR.

Approach continued

We have a dedicated office set up for the purpose of these telemedicine visits. The local health department nursing staff have been trained in how to utilize the special equipment that will allow the physician to auscultate lungs and heart sounds. This equipment includes: a high definition camera for interactive videoconferencing, an encrypted network, a hand held high definition camera, and a blue tooth enabled stethoscope. These tools will allow the physician to do a thorough and complete patient exam. The patient will have previously been to the lab (within the week prior to the visit) so that the transplant team will have lab work and be able to access the patient and their specific needs.

Our transplant team (as above) will participate in each visit in order to assure that the patient receives the same level of "care" that they would receive here at Children's of Alabama.

There have been some unique challenges that have been encountered as this new care venture. Some of those have been:

The coordination of care over state lines (for licensed nurses that have to follow up with the out of state patient);

How billing will occur for the physician and for the hospital;

Storage of patient records, as they are not physically being seen in Children's of Alabama;

Financial/revenue stream issues (paying for time for staff who don't or can't bill, along with the loss of hospital ability to bill for the facility fee);

Regulatory compliance issues with CMS and UNOS for the transplant recipients;

How will the private payors like BCBS pay and what will the co-pay for the parent/patient be; and

How the hospital will capture the time of the staff for "non-clinical" time.

Results:

Results: This is a new program, so we have no results at this time. It is slated to "go live" in March of 2018. The hope for this new program is to decrease the number of no show clinic visits, and improve our patient outcomes and lengthen the life of the allograft for these patients.

Planned Conclusion: By providing more simple access to transplant care, the outcomes of the pediatric transplant patients will be enhanced by improved compliance with clinical visits and the difficulties faced by families of traveling many hours each way for a clinic visit will be lessened.

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