Transitional Dialysis Care

A patient-centric approach to gently ease patients into dialysis
In the United States, less than 12% of patients requiring dialysis are prescribed home hemodialysis (HHD) or peritoneal dialysis (PD)\(^1\), even though compared with conventional in-center hemodialysis, both HHD and PD are associated with better clinical outcomes when patients receive treatments more frequently, when medically necessary. Some of the improved clinical outcomes for patients receiving more frequent HHD include improved survival\(^2\), reduced cardiac-related hospitalizations\(^3\), and improved quality of life.\(^4\)-\(^7\) In addition, one study showed out of 1365 patients, 66% and 88% reported not being presented education on PD and HHD, respectively.\(^8\)

However, 90% of nephrologists would choose a home-based dialysis modality for themselves if their kidneys failed.\(^9\) Also, nephrologists rated HHD as the most under-utilized dialysis treatment option, in a recent survey.\(^10\)

**IS THERE A MORE PATIENT-CENTRIC MODEL?**

**OPPORTUNITY FOR A MORE PATIENT-CENTRIC CARE MODEL**

Patient access and education to home therapies, particularly home hemodialysis has been limited, and data shows only 26% of dialysis facilities in the United States even offer HHD.\(^11\)

Part of the discrepancy between nephrologists’ choice and patient access may be the current dialysis delivery care model. Today, dialysis care for new to dialysis patients often lacks a patient-centric educational curriculum. With approximately 50% of patients “crashing” into dialysis\(^6\), there is a need for a more patient-centric care mode.

**THE SOLUTION: TRANSITIONAL DIALYSIS CARE**

Transitional Dialysis Care is a patient-centric approach to gently ease a new to dialysis patient into dialysis. Failed transplant or PD patients may also benefit from Transitional Dialysis Care. Starting these patients in a Transitional Dialysis Care Unit where they receive more frequent therapy (>3 treatments per week), when medically necessary, may help stabilize patients in the first 90 days and provide time for patients to cope with several psychosocial challenges including, anxiety, depression, confusion, and fear\(^8\). In addition, providing new to dialysis patients with thorough education on all dialysis modalities may help them make an informed choice that meets their clinical and quality of life goals.

**FOR NEW TO DIALYSIS PATIENTS, TRANSITIONAL DIALYSIS CARE MAY RESULT IN:**\(^{1-7}\)

- Better Clinical Outcomes
- Lower Cardiac-Related Hospitalizations
- Improved Health-Related Quality of Life
- Educated patients on all dialysis modalities
Case Study
The Satellite Healthcare Optimal Transitions Program

The Transitional Dialysis Care model was highlighted in a recent article published in the Seminars in Dialysis section of the Wiley Online Library regarding Satellite Healthcare’s Optimal Transitions (OT) program. The full article can be found at https://doi.org/10.1111/sdi.12651. Optimal Transitions (OT) is the trademark property name for Satellite Healthcare’s Transitional Dialysis Care Unit which concentrates on patient education and treatment in the first 30 days following initiation of dialysis. It was designed for in-center environments by looking at whether this type of model could increase home adoption rates as well as improving quality of life and reducing hospitalizations, especially in the first 90 days, for their dialysis patients.

The program consists of 2-4 hemodialysis stations using NxStage and is staffed by both a dedicated RN and PCT. Satellite designed the program using four key areas to address common unmet needs: Life Plan, Education, Stabilization, and Self-care.

LIFE PLAN
As part of Life Plan, a dedicated staff member focuses on understanding each patient and assisting them in their modality selection based on their life goals and lifestyle. The OT program provides individualized patient education for up to 4 weeks, giving patients time and support to make an informed modality choice.

EDUCATION
The program provides up to 4 weeks of in-depth education across all dialysis modalities to allow patients to make an informed choice. Educational sessions were designed to be discussion-based, allowing patients and their family members or care partners to ask questions relevant to their personal situation. While patients are deciding on a dialysis modality, education on each modality as well as hands-on self-care across multiple modalities are presented using a set training course.

Figure 1 below describes the OT program’s patient education curriculum.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>GOAL</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement and Empowerment</td>
<td>Understand and leverage patient &amp; family goals, motivations, and support network to create individualized patient plan</td>
<td>Personalized Life Plan</td>
<td>≤4 Weeks</td>
</tr>
<tr>
<td>Treatment Initiation and Optimization</td>
<td>Provide daily hemodialysis and stabilize the patient</td>
<td>Patient Stabilized</td>
<td>1-2 Weeks</td>
</tr>
<tr>
<td>All Modality Education and Choice</td>
<td>Educate on all modalities, and provide second-level education on modalities of interest</td>
<td>Patient/Family Chooses Modality</td>
<td>1-2 Weeks</td>
</tr>
<tr>
<td>Self Care and Management</td>
<td>Patient experiences 1-2 modalities of choice and is introduced to self care and management</td>
<td>Patient Experiences Chosen Modality</td>
<td>2-3 Weeks</td>
</tr>
<tr>
<td>Optimal Transition</td>
<td>Coordinate with In Center and Wellbound staff to transition patient with higher touch of care</td>
<td>Transition to Wellbound</td>
<td>1-2 Weeks</td>
</tr>
</tbody>
</table>

STABILIZATION
The stabilization period allows patients to receive dialysis treatments 5 days a week for up to 4 weeks. This optimizes staff-to-patient contact and accelerates the improvement of uremic symptoms and volume overload as well as increases the psychosocial support needed during this critical time for patients and their families.

SELF-CARE
During Self-Care, patients receive hands-on experience with different dialysis modalities. Providing self-care opportunities using the HHD and PD machines to help alleviate fears, enabling and motivating patients to choose home modalities.

NXSTAGE SUGGESTED CONSIDERATIONS
While success metrics are still being gathered by Satellite Healthcare, a recent Transitional Dialysis Care study in the United States showed that over 70% of the centers in the survey reported that +30% of their Transitional Dialysis Care patients chose a home modality. To implement a Transitional Dialysis Care program, several key challenges must be considered including:

1. An operational plan should be developed for patient screening criteria, patient education curriculum, and patient intake

2. Patient curriculum should be created to educate patients and align their life goals with the dialysis modality they select

3. Utilizing a dedicated staff and ensuring staffing ratios allow for individualized patient care
The reported benefits of home hemodialysis may not be experienced by all patients. Home hemodialysis with NxStage during waking hours may not require a care partner, provided a physician and a trained and qualified patient agree that solo home hemodialysis is appropriate. However, patients performing nocturnal treatments are still required to have a trained care partner. Care partners are trained on and follow system guidelines for proper operation and on what to do and how to get medical or technical help if needed.

The NxStage System One is a prescription device and, like all medical devices, involves some risks. The risks associated with hemodialysis treatments in any environment include, but are not limited to, high blood pressure, fluid overload, low blood pressure, heart-related issues, and vascular access complications. The medical devices used in hemodialysis therapies may add additional risks including air entering the bloodstream, and blood loss due to clotting or accidental disconnection of the blood tubing set.

A trained and qualified patient may dialyze alone, without a care partner present (solo home hemodialysis), provided the patient and physician agree that solo home hemodialysis is appropriate. Certain risks associated with hemodialysis treatment are increased when performing solo home hemodialysis because no one is present to help the patient respond to health emergencies. If patients experience needles coming out, blood loss, or very low blood pressure during solo home hemodialysis, they may lose consciousness or become physically unable to correct the health emergency. Losing consciousness or otherwise becoming impaired during any health emergency while alone could result in significant injury or death. Additional ancillary devices and training are required when performing solo home hemodialysis. Patients should consult with their physician to understand the risks and responsibilities associated with solo home hemodialysis using the NxStage System One.

Certain risks associated with hemodialysis treatment are increased when performing nocturnal therapy due to the length of treatment time and because therapy is performed while the patient and care partner are sleeping. These risks include, but are not limited to, blood access disconnects and blood loss during sleep, blood clotting due to slower blood flow or increased treatment time or both, and delayed response to alarms when waking from sleep. Patients should consult with their physician to understand the risks and responsibilities associated with home nocturnal hemodialysis using the NxStage System One.

Patients should consult with their doctor to understand the risks and responsibilities of home and/or more frequent hemodialysis using the NxStage System One.

REFERENCES: