

THE ARCHITECT'S ANGLE

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Do You Know That...?

- The recently released report of the Commission on Health Care Facilities in the 21st Century generally encourages community based health initiatives such as dialysis.
- As most dialysis clinics within a nursing facility are intended to serve residents of that facility, the Health Department does not generally consider community need a major factor in granting approval.

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On-Site Dialysis – Is It Right For Your Nursing Facility

Nursing facilities continue to explore the possibility of providing dialysis services in-house. The primary goals are to differentiate themselves within their market area while providing needed services to their residents and the surrounding community. A secondary benefit is the activation of underutilized storage and/or service areas which are most often the areas converted into dialysis suites.

It is somewhat daunting to undertake the addition of a new service especially one that can be labor intensive and requires specialized management and significant infrastructure improvements. In our dialysis project work, we have seen facilities take one of two approaches:

1. Lease space to an operator and take no part in the operation. This is the least expensive approach since the operator performs the build-out, but it gives the facility the least control. The outside operator already holds a dialysis license, so the approval process is shorter.
2. The facility constructs the build-out and contracts with an operator to run the clinic. In this case the facility bears the construction cost but has the most control. Since the facility is applying for the license, it must undergo a full CON review. However, once obtained, a group may create satellite units at other affiliates through a shorter approval process.

The most important ingredient in dialysis treatment is pure water. Treated water, in combination with acetate (acid) and bicarbonate form the dialysate solution delivered to each dialysis machine.

Water treatment involves the removal of solids (mostly metals) and biological contaminants. In smaller operations, treatment can occur locally at each station through the use of a portable reverse osmosis (RO) machine. This approach results in the labor intensive hand mixing of acetate and bicarbonate at each treatment station and dictates a significant amount of storage space for these liquids.

The cleaner approach is to treat water centrally and pump the water and acetate (from a separate central tank) directly to each dialysis machine. There, only bicarbonate must be added. This approach allows for better quality control and is much less labor intensive. Most facilities utilize disposable dialyzers to avoid the need to clean and reprocess the units on site. This saves time and space and also reduces potential liability. The preparation of special dialysate solutions for specific patients is most often outsourced for the same reason.

Virtually the entire dialysis suite must be fed by emergency power, so a facility's existing emergency generator and distribution system must be evaluated to see if there is sufficient capacity. Additionally, treatment areas require a higher number of fresh air changes than staff, office or service spaces, dictating that a dedicated HVAC unit be installed for the dialysis unit.

John W Baumgarten Architect, P.C.: Recent Dialysis Projects

