# In Search of Albumin Best Practices

#### Sources:

➤ A Network interview with six dietitians in facilities where 50% of patients have albumin levels ≥ 4 (BCG)

➤ A comparison of the 2006 Dialysis Facility Reports (DFR) between the 6 facilities with the highest and 6 facilities with the lowest albumin levels.



### Interview tips:

- > Team approach to patient education: all staff participate
- $ightharpoonup KT/V \ge 1.4$ ; better dialyzed = better appetite
- > Assess all variables, not just albumin (i.e., ferritin, infection, inflammatory process, co-morbid conditions)
- ➤ Increase the albumin target to  $\geq$  4 (BCG) and  $\geq$  3.7 (BCP); talk with your nephrologists
- ➤ Facilities with higher albumins had higher AV fistula rates, lower long term catheter rates, and lower infection rates

#### What the DFR numbers show:

Percent of Patients	Weighted	Weighted
	average* at	average* at
	facilities with	facilities with
	>50% of patients	<10% of patients
	meeting serum	meeting serum
	albumin targets	albumin targets
% using AVF, 2006; p < 0.001	64.7	50.7
% using Catheter, 2006; p < 0.001	20.5	35.2
% using Catheter > 90 Days with no other		
access in place, 2006; p < 0.001	6.6	16.4
% Hct 33 or more, 2006; p < 0.05	93.4	88.6
% Asian/Pacific Islander, 2006; p < 0.001	12.2	2.1
% Native American, 2006; p < 0.001	1.1	7.5
% Hispanic, 2006; p < 0.001	12.7	3.7
% White, 2006; p < 0.001	77.5	89.7
% at Nursing Home, 2006; p < 0.001	11.5	21.4
% Medicare (any kind), 2006; p < 0.001	83.7	94.7
% Age 65 or more, 2006; p < 0.01	45.7	56.2
Standardized Hospitalization Ratio, 2003-05;		
p < 0.05	0.79	0.73

<sup>\*</sup>The weighted average is the average of all patients at all facilities in each group.

## **Potential Barriers to Achieving Albumin Targets**

(Source: Interview of six dietitians at facilities with low albumins.)

- > Patient apathy
- > Patient denial
- > Food doesn't taste good
- ➤ High protein foods expensive
- Recreational drug use (i.e., methamphetamine)
- Very elderly population
- > Low socioeconomic status
- Lower goals in facilities:3.7 (BCG) and 3.5 (BCP)
- > Poor appetite
- > Illness
- > Age
- Income level
- Staffing hours
- Staffing ratios
- Lab assay testing and equipment
- Diabetes complications (i.e., open wounds, amputations)

- Albumin not appropriate marker for nutrition
- > Acute phase response
- > Inflammatory response
- Multiple co-morbid issues
- People don't know how to cook
- Supplements not available, just samples
- Cost of supplements
- Dialysis schedule interferes with meal times
- Albumin is not the only value to monitor
- Lower educational level
- Patients living alone, no support
- ➤ Lack of medical coverage
- ➤ Lack of dietary compliance
- > Hospitalizations