Summary:
Clinical records of 17 patients with inoperable malignant bowel obstruction (IMBO) receiving home parenteral nutrition (HPN) discharged from Yale-New Haven Hospital from 1980 to 1989 were reviewed by the Nutrition Support Team (NST) to determine the patient and family perception of the value of HPN therapy and if quality of life improved because of the HPN. Of the 17 patients 9 had ovarian cancer, 4 had colon cancer, 2 had appendix cancer, 1 endometrium cancer, and 1 stomach cancer. All 17 patients had IMBO that prevented adequate enteral fluid and nutrient intake. Thirteen required gastric drainage because vomiting and abdominal pain could not be controlled pharmacologically. Value of the therapy as perceived by the patient, family, and NST was rated as 0-not beneficial, 1- beneficial, or 2- highly beneficial. These ratings were based on the length of survival, rehabilitation status; ease of management of therapy by patient, family, and home health care providers; nature of home life, and frequency and intensity of clinical intervention by the NST.

Results reported by Authors:
The median survival of all patients was 53 days. Median survival was shortest in those patients with ovarian and endometrial primaries, intermediate in those with colonic primaries, and longest in those patients with other gastrointestinal primaries. All patients died of their underlying disease and 82% of deaths occurred at home.

Fourteen patients and their families perceived their therapy as highly beneficial or beneficial. NST agreed with this assessment in 11 of the patients. The 3 patients that NST did not feel benefited from HPN had a short duration of HPN (less than 25 days) or minimal rehabilitation. Two of these patients survived 10 and 22 days, and the NST felt that parenteral fluid therapy would have provided similar quality of life palliation at a lower cost and in a simpler manner. The third patient survived for 77 days, however spent 55 days in the hospital due to dyspnea and depression. She perceived the benefit of her therapy to be related to her husband’s desire to have her live as long as possible. NST felt this did not provide direct benefit to the patient. In the remaining cases, the patients, families, and NST felt that HPN contributed to an improved quality of life outside of the hospital. Three patients were readmitted secondary to possible complications from HPN. Two patients were admitted for febrile episodes but it was determined that neither the HPN solution nor the venous access catheter were the source of the fever. The third patient was readmitted because her venous catheter became dislodged.
Authors Conclusions:
The authors concluded that HPN for patients with IMBO may be most beneficial for those patients with gastrointestinal tract primary tumors and is usually perceived by the patients and caregivers as beneficial. HPN should only be considered when other measures have failed and when survival beyond 40 days is probable. It was observed that carefully selected patients who would otherwise die of dehydration or starvation can survive on HPN longer than 40 days with an improved quality of life.