

## The Effects of Biofreeze® on Self Discharge Rates: A Multi-Center Pilot Study

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**Background:** For private practice clinicians, patients who present for their initial evaluation and then don't return for follow up care are a challenge for not only patient improvement, but for the business. This is commonly defined as a self discharge. The rate of self discharge (numbers of self discharges divided into the total new patients presenting) has been followed in 4 outpatient chiropractic clinics and 1 outpatient physical therapy clinic over a 3 year period. There were a few purposes of this study: (1) To determine the rate of self discharge in these clinical settings, (2) to determine the most common conditions in those self discharging patients, and (3) to

determine if the application of Biofreeze® both in the clinic and at home decreases the rate of self discharge. Previous studies have shown that the application of Biofreeze® on the first visit in patients with acute, bilateral neck pain gives greater pain reduction, lasts longer, and is more comfortable for the patient than ice. The investigation is designed to determine result in a decrease in self discharge rates.

**Intervention:** All patients presenting for an initial evaluation received an application of Biofreeze® spray on their area of chief complaint while in the clinic, but at the end of their visit. The patients also performed therapeutic exercises, receives appropriate manual therapy, and appropriate modalities. For their home care, they received a bottle of Biofreeze® spray for pain relief and a home exercise program.

### Historical Results:

Practice	Year	Total Evals	Total Self Discharges	% Self Discharges	Conditions
Chiropractic	2007	2074	75	3.6%	1. Neck, 2. Low Back, 3. SI
	2008	2097	85	4.0%	1. Neck, 2. Low Back, 3. Myalgia
	2009	2291	78	3.4%	1. Neck, 2. SI, 3. Low Back
Phys Therapy	2006	781	43	6.8%	1. LBP, 2. Ankle, 3. Shoulder
	2007	728	38	5.2%	1. Ankle, 2. LBP, 3. Shoulder
	2008	777	62	7.9%	1. Ankle, 2. LBP, 3. Meniscus

### Results:

Practice	Dates	Total Evals	Total Self Discharges	% Self Discharges	p-value
Chiropractic	2010 Jan-April	792	21	2.7%	P=.0.17
Phys Ther	2010 Jan-May	316	5	1.6%	P=.0008

**Conclusions:** The addition of Biofreeze® during initial evaluation and given for home usage significantly decreased the number of self discharges in the physical therapy clinic. This same significant reduction in self discharges was not seen in the chiropractic clinics.

