



Centre for Neuro Skills



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Recording Data on Recording Data: A Plan That Increases Data Collection Through Applied Behavior Analysis

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INTRODUCTION:

Traumatic brain injury (TBI) occurs in approximately 1.4 million Americans each year (Centers for Disease Control, 2008). The effects of TBI are devastating and affect many areas of functioning including cognition, physical, and psychosocial. Although attention, memory, problem-solving, range of motion, balance and coordination are affected, it has been reported that the behavioral effects of TBI are often more disruptive than the cognitive or physical impairments (Kolitz et al., 2003). Behavioral consequences of TBI can range from irritability to combative physical aggression. In fact, it has been reported that agitated behavior may occur in 35-96% of patients in the acute recovery period and in 5-71% of patients in the post-acute phase of recovery (Kim, 2002). It is evident from these statistics that the behavioral effects of TBI are prevalent at both immediately following the injury, as well as, in the latter stages of recovery. Behavior data collection is essential to guide programming decisions, medication adjustments, discharge placement options for the TBI client following rehabilitation and can provide other vital information regarding the treatment of behavior following brain injury. Collecting all the possible data is important to maintain confidence in the results and subsequent decisions.

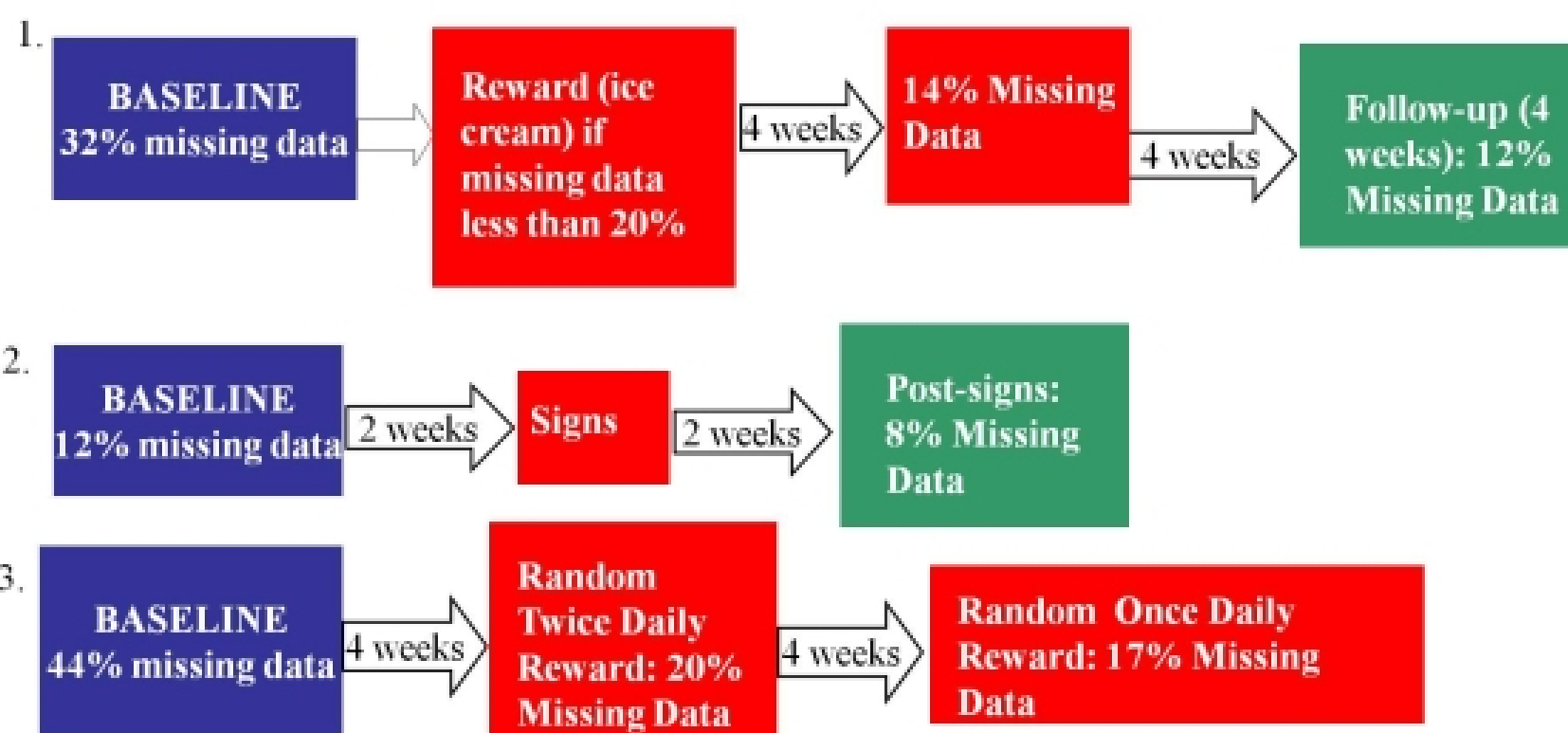
OBJECTIVES OF THE CURRENT STUDY:

This study was designed to increase therapist compliance with data collection using principles of applied behavioral analysis. At Centre for Neuro Skills (CNS), individuals with behavior issues following TBI are tracked in every therapeutic discipline using a 15 minute interval data sheet. Moving these data sheets from therapist to therapist across five therapeutic disciplines can be challenging and "missing" behavioral data can be a problem.

Since applied behavioral analysis (ABA) techniques were already currently being used in the clinic setting with the clients, it seemed likely that these same ABA techniques (i.e. reinforcement) would also work with the therapists.

METHODS:

Three paradigms were used to determine therapist compliance with data collection:



RESULTS:

The results of these three paradigms to increase therapist compliance with data collection indicate varying conclusions. While initially the group reward of an ice cream social dramatically reduced missing data, the posted sign reminders maintained the lowest levels. A follow-up variation was implemented when missing data again was elevated. In method three, random twice daily small gift cards were provided if therapists were found marking and/or passing the data forms. Excellent improvements in missing data were seen. Even better results were evident implementing a random once daily moderate gift card.

DISCUSSION:

A review of the three paradigms to increase therapist data collection compliance indicates that therapists responded favorably to all interventions. The most significant reduction in missing data was following the twice daily, small gift cards provided randomly to staff that were directly observed filling out a data form or passing the data form to the next staff member. Posted reminders, colorful signs with "catchy" prompts (i.e. "Be seen passin' the green") appeared to accelerate the improvement in missing data following the first group reward paradigm. The group reward was difficult to maintain secondary to determining a suitable reward that all staff (30+) were interested in. While therapists could encourage each other to achieve the goal, certain therapists were left to bear a greater burden for those less interested. The individual reinforcers, while small, appeared to encourage the needed therapist behaviors, filling out the forms and passing them to others.

Initial attempts to replicate the results in a similar clinical setting were unsuccessful. Missing data improvements were not seen following posted reminders nor random, twice daily incentives. Further efforts to replicate the results would be appropriate, including implementing a group reward.