

Implementation of a Behavior-Based Intervention in Primary Care Settings for Individuals with Developmental and Intellectual Disabilities

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Introduction

- Patients with developmental and intellectual disabilities often forgo healthcare and medical procedures related to the lack of high-quality care coupled with compassionate behavioral support.
- Current evidence of the integration of compassionate behavioral support and healthcare is qualitative, limited to case studies in children less than 12 years of age, and focused on the impact of desensitization in inpatient settings.
- The purpose of this study is to use environmental engineering to implement a high-quality, compassionate, behavioral care model during specific medical procedures among individuals with developmental and intellectual disabilities 12 to 89 years of age in primary care settings.

Objectives

- Assess the patient's rate of engagement in non-compliant behaviors using a procedure task analysis.
- Provide patient-centered resources which will enable healthcare providers and medical assistants to identify and prevent potential or actual non-compliant behaviors during medical procedures.
- Implement a multidisciplinary compassionate, behavioral intervention to improve compliance with medical procedures.

Methods

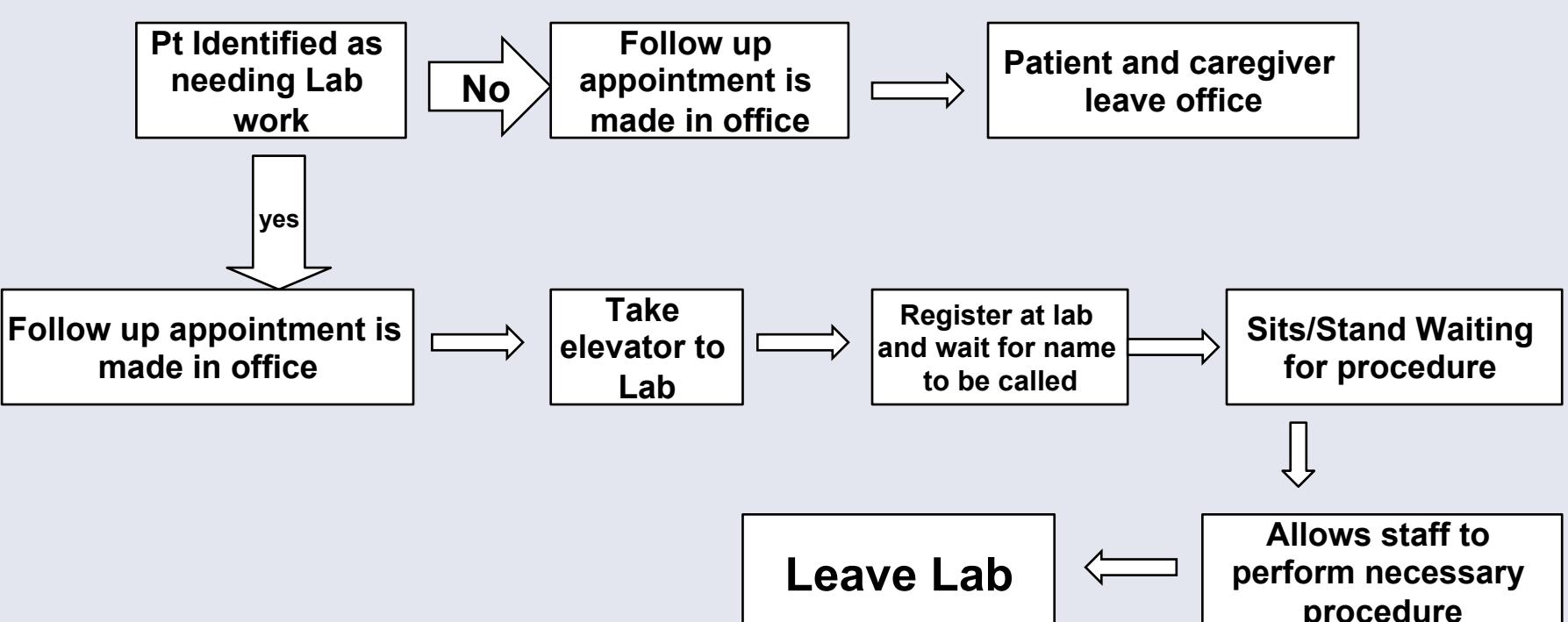
In collaboration with the Hamilton County Developmental Disability Services, a training program was developed for staff who would be involved with each stage of the patient's care, such as medical providers, physicians, and phlebotomists (figure 1). The training program includes:

1. Defining the function of behavior.
2. Defining the motivating operations behind behavior.
3. Defining and describing different levels of reinforcement (e.g. unintentional reinforcement, non-contingent reinforcement, contingent reinforcement).
4. Promoting the use of compassionate behavioral support methods, including labeled praise, the Premack Principle, preference assessments, and sensory supports

A survey will be administered to staff before and after the training to compare the self-reported ability to identify the components of behavior, styles of reinforcement, and the effectiveness of the training

1. How comfortable are you with recognizing behavior that is safe versus unsafe in nature?
2. How comfortable are you with the sequence 'antecedent-behavior-consequence'?
3. How comfortable are you with utilizing strategies to de-escalate a person who is upset?
4. How comfortable are you with the terms preference vs reinforcement in the context of behavior support?
5. How comfortable are you with using motivation to establish behavioral stable and safe levels of responding?
6. How comfortable are you in knowing what questions are useful to ask of caregivers and family for the purpose of learning about a client's behavioral history?
7. How comfortable are you with the term sensory supports for people with IDD?
8. How comfortable are you in identifying voluntary vs reflexive behavior?

A procedure task analysis was done to allow staff to identify at what stage in the process patients engage in maladaptive behaviors and require behavior-based intervention. Goal is for at each stage of the process patients will have a calm body (calm being defined as safe hands/legs/voice).



If maladaptive behaviors are identified staff is to identify tangible and non-tangible rewards to help engage patient in target behaviors. Rewards are based on a preference assessment given to all patients.

Questions	Almost never	Seldom	Occasionally	Frequently	Almost Always
I don't like strong smells (perfumes, soaps, candles, candy, flowers)					
I like to be active and don't like sitting for a long time (e.g. running, jumping, being tickled, kicking balls)					
I like looking, touching, or wearing things that have bright lights or are colorful					

Behavioral interventions will be performed using two strategies:

Level 1: Non-Contingent Reinforcement

- Reinforcement is delivered consistently throughout the session non-contingent on the occurrence of the target behavior (Cooper, Heward, Heron, 2007).

Level 2: Contingent Reinforcement

- Reinforcement delivered contingent on target behavior to increase (engaging in labwork process) (Cooper et al., 2007).

The goal of the study is to use this integrated model as usual practice to improve the standard of care for patients with developmental and intellectual disabilities to improve compliance with healthcare.

Next Steps

- Small cohort patients to be randomly selected to participate in this study in order to identify the effectiveness of the behavioral intervention in increasing patient compliance.

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Questions - (continued on the next page)

Questions	Almost never	Seldom	Occasionally	Frequently	Almost Always
I don't like strong smells (perfumes, soaps, candles, candy, flowers)					
I like to be active and don't like sitting for a long time (e.g. running, jumping, being tickled, kicking balls)					
I like looking, touching, or wearing things that have bright lights or are colorful					
I become angry or upset when I have to choose between two or more objects					
I become angry or upset when people or objects are moving too fast					
I move away when strangers get too close to me					
I dislike being touched by anybody (e.g. holding hands, hugs)					
I prefer to take a little while longer to process new information					
I can do two things at once (e.g. playing on an iPad while listening to music)					
I don't like loud or unexpected noises (dog barking, telephone ringing)					
I like to be "weighed down" by heavy objects such as weighted blankets or pillows					