

Infusing Excellence into Post-Acute Care

Rachel Tran, PT, DPT, NCS
Clinical Director
Transitional Living Center
Casa Colina Hospital and Centers
for Rehabilitation

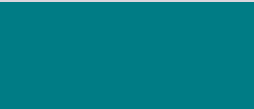




Learning Objectives

Learners will be able to identify all necessary components of a comprehensive, post-acute rehabilitation program.

Learners will be aware of advances in technology used to optimize recovery after major brain and spinal cord injury.



TLC CONTINUUM OF CARE

Casa Colina's Transitional Living Center provides a full continuum of post-acute care including residential facility with 24 hr supervision, day treatment program, and a new advanced day treatment program that promotes a productive and meaningful day from the clients home.

Regardless of the setting, all clients have opportunities to work with physical therapy, occupation therapy, speech therapy, neuropsychology, and recreational therapy.

RESIDENTIAL

5 hours of therapy each day

Evening activities

Supported, living structure

DAY TREATMENT

5 hours of therapy each day

Integration into the community

ADVANCED DAY TREATMENT

Daily planning groups at start of day

Daily check in at end of the day

Personalized therapy session

**INTENSITY
IS OUR MAIN
INGREDIENET**



REHABILITATION AT TLC

PHYSICAL THERAPY

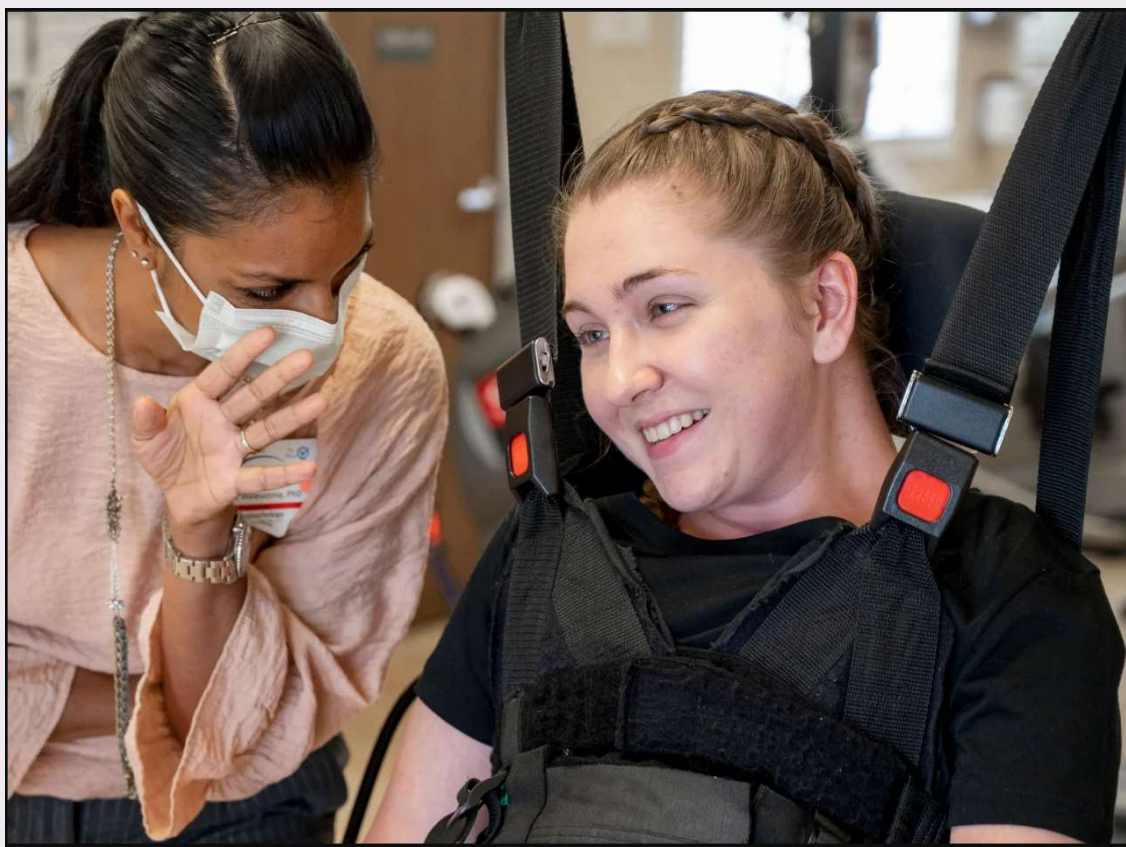
Pain Management
HIIT
Circuit Training
Gait
Sitting Balance
Standing Balance
Community Walk
Assisted Fitness
LA Fitness
Endurance Hike
Core Strengthening
Home Exercise Program
Vestibular
Cardio-endurance

OCCUPATIONAL THERAPY

ADL Training
Arm Function
Shoulder
Scapular Mobility
Mat Mobility
Muscle Re-education
Functional Cognition
Vision
Yoga
Meditation
Home Management
SCI Support Group
Pool Therapy

SPEECH THERAPY

Cognitive Strategies
Weekly Preparation
Technology
Productive Day
Cognitive Endurance
Language
Reading
Problem Solving
Social Pragmatics
News and Media
Budgeting
Healthy eating
Diabetes Management



NEURO- PSYCHOLOGY

- Individual therapy
- Group therapy
 - Pain Management
 - Mood Management
 - Brain Injury Education
 - SCI Support Group
- Family/caregiver education and support
- Facility wide Behavioral Plan
- Individualized behavioral Plans

RECREATIONAL THERAPY

Woodshop
Gardening
Arts/Painting
Adaptive Painting
Sports group
Dance
Yoga
Cooking
Outdoor Adventures



TLC in the COMMUNITY

Weekly Community Outings

Social/Pragmatic Outings with Speech Therapy

Library Outings

Problem Solving Outings with Speech or Occupational Therapy

Sports Group with Physical and Recreational Therapy

Endurance Hike

Grocery Store Outing with Occupational Therapy

Daily outing to Target/Superior/Dollar Tree

Regular Outings

Navigating Public Transportation

Local Events (sporting games, car shows, county fair)

Weekend Outings (farmers market, mall, swap meet)

SUPPORTED LIVING

Residence

Consistent supervision

Assistance with mobility and self care as needed

Close proximity to tech and nursing station

Assistance with room management and laundry as needed

Apartments

(Modified) Independent with mobility and self care

Independent with cleaning room, kitchen and laundry

Supervision not required for cooking

Monthly apartment council meetings

Weekly grocery budget

50 ft from residence

Mulberry House

(Modified) Independent with mobility and self care

Independent with cleaning room, kitchen and laundry

Supervision not required for cooking

Monthly House council meetings

Weekly grocery budget

50 meters from residence with partitioned back yard and gated entrance



EXCELLENCE IS THE SPECIAL SAUCE

PHYSICIAN LED PROGRAM

ON CALL PM&R PHYSICIANS

ONSIGHT NURSING 24 HR/DAY

CASE MANAGEMENT TEAM

PHYSICAL THERAPY RESIDENTS

NEUROLOGIC CLINICAL SPECIALISTS

OCCUPATIONAL THERAPY FELLOW

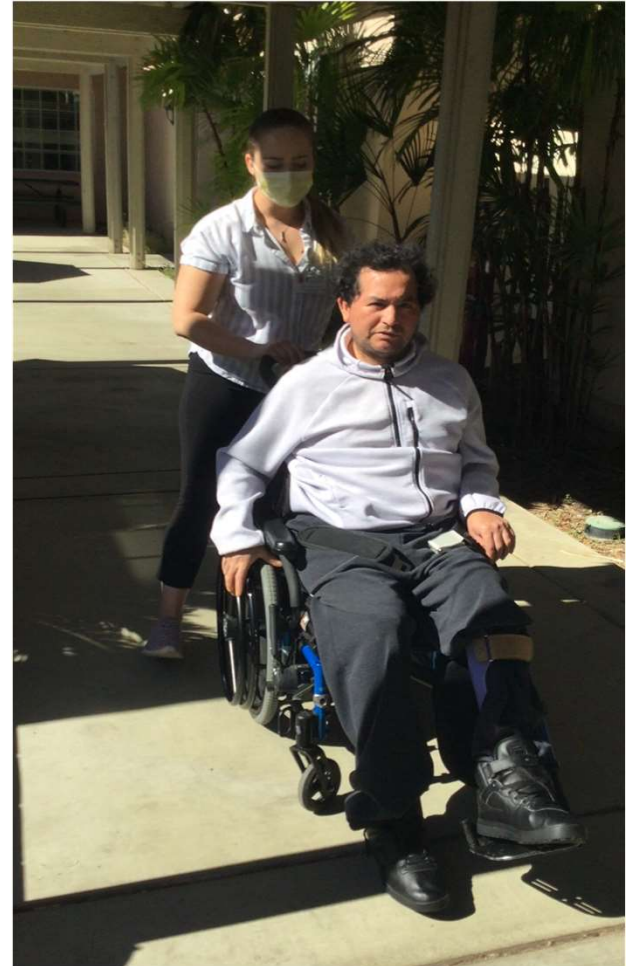
CERTIFIED DRIVER REHABILITATION SPECIALIST

ASSISTIVE TECHNOLOGY PROFESSIONALS

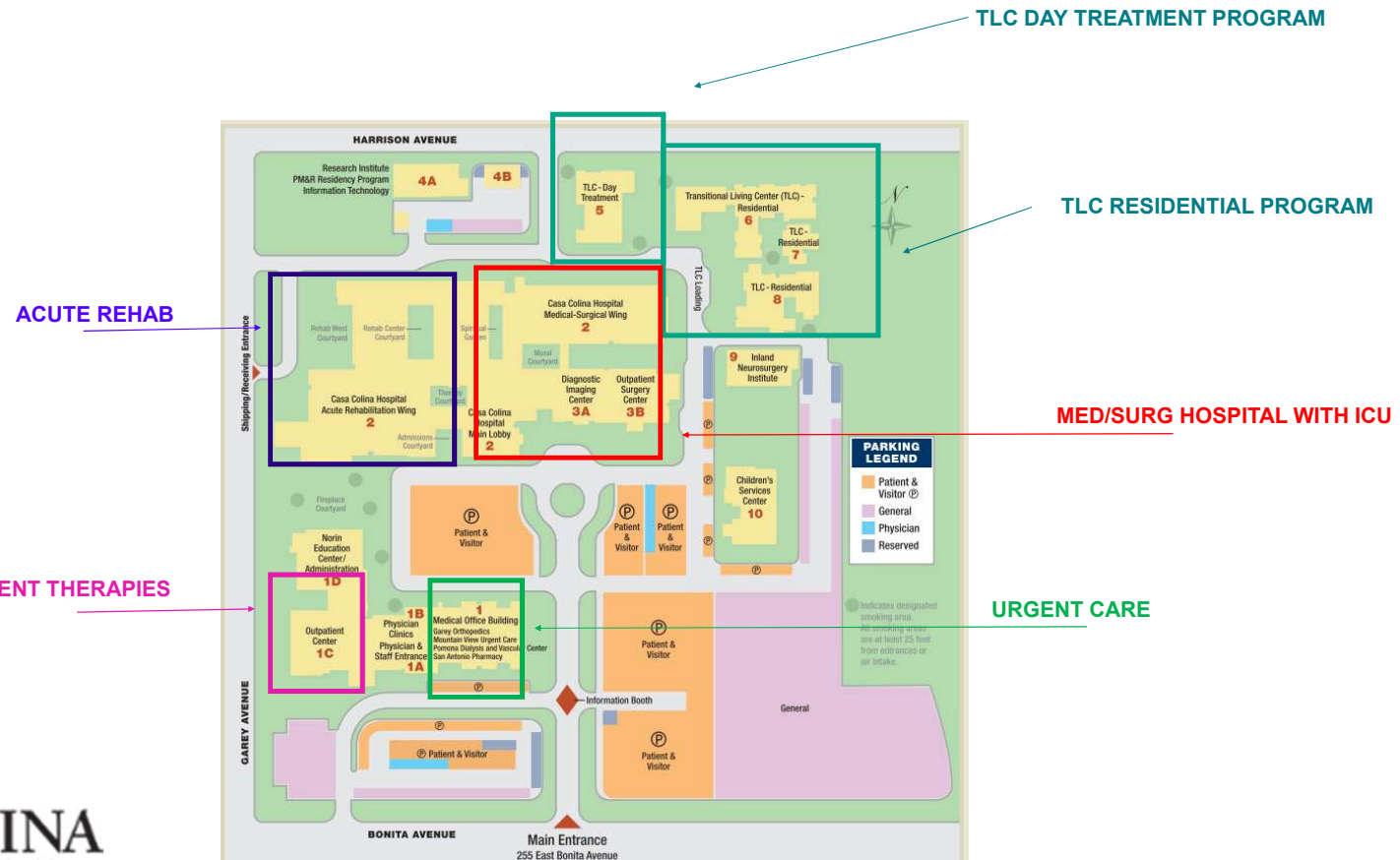
CERTIFIED BRAIN INJURY SPECIALISTS

NEUROPSYCHOLOGY TEAM

EXCELLENCE IS THE SPECIAL SAUCE



TLC ACCESS TO CARE



REHABILITATIVE TECHNOLOGIES

Motor Recovery

Vision

Driving

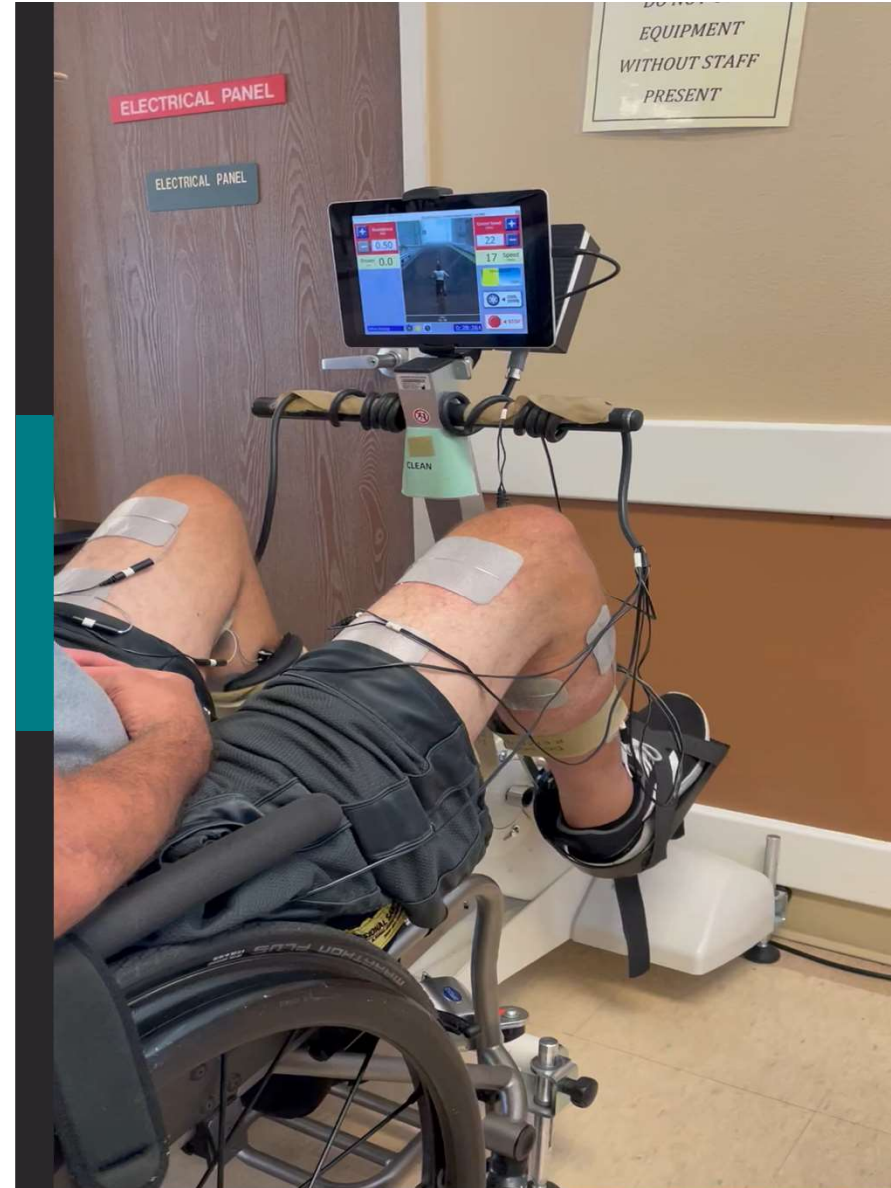
Vestibular

Cognitive

RTI FUNCTIONAL ESTIM CYCLE TECHNOLOGY FOR MOTOR RECOVERY

Benefits:

- Reduce muscle atrophy
- Reduce muscle spasms
- Improve local circulation
- Maintain or increase range of motion
- Facilitate muscle re-education
- Increased respiration and circulation
- Decreased secondary medical conditions



RTI XCITE TECHNOLOGY FOR MOTOR RECOVERY

Multi-channelled electric stimulation programmed to activate muscles in pattern to produce task specific movement.

Examples:

- Feeding
- Sit to stand
- Grasping a cup
- Brushing teeth
- Transfers





EXO Skeleton TECHNOLOGY FOR MOTOR RECOVERY

Battery powered robotic suit that enable a patient to stand and walk.

Benefits:

Improved circulation

Increased oxygen intake

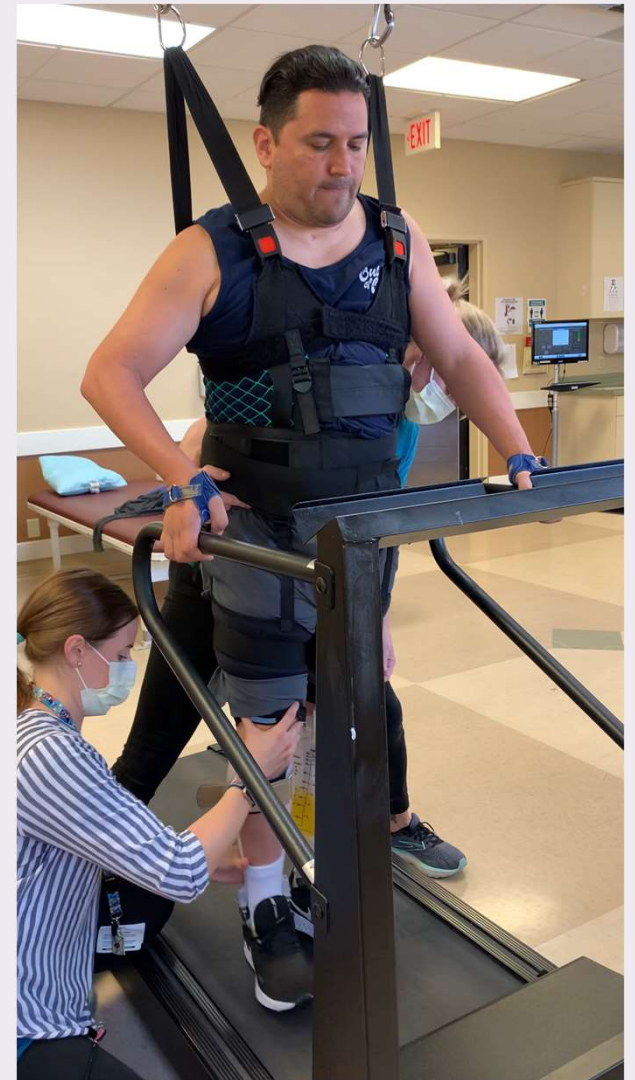
Decreased pain

Improve bowel and bladder function

Maintenance of joint and bone density

Psychological benefits

VECTOR: BODY WEIGHT SUPPORT SYSTEM TECHNOLOGY FOR MOTOR RECOVERY



Bioness L300, H200 TECHNOLOGY FOR MOTOR RECOVERY

Electric stimulation programmed to activate during a task to re-educate muscle to normal movement.



COMPLEX SEATING SMART DRIVE TECHNOLOGY FOR FUNCTION



BITS

TECHNOLOGY FOR VISION RECOVERY

Impairments addressed:

- Attention
- Memory
- Visual scanning
- Reaction time
- Coordination
- Sequencing
- Balance
- Range of motion
- Endurance





BITS BALANCE

TECHNOLOGY FOR

VESTIBULAR

REHABILITATION

The Bioness Integrated Therapy System for Balance (BITS Balance) combines visual, cognitive, motor, and balance training into one system.

BITS Balance adds proprietary motion sensors to track patient movements and a balance platform for challenging weight shift.

Specific aspects of the new technology allow providers to track patients' limits of stability, fall risk, range of motion, body sway, and more



DRIVING SIMULATOR

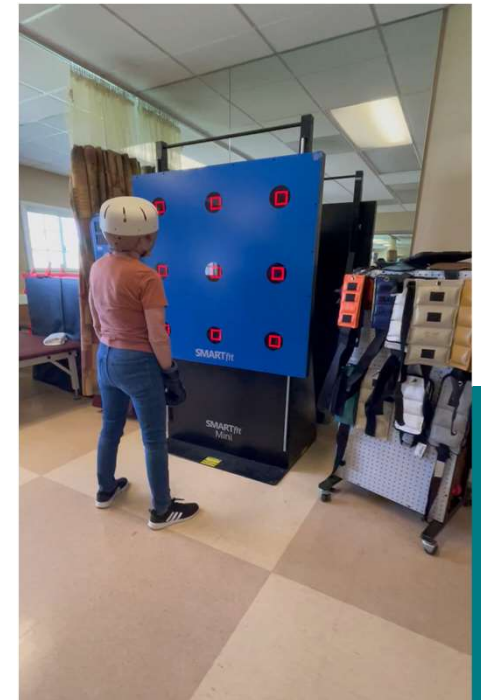
TECHNOLOGY FOR FUNCTIONAL RECOVERY

Summary of Simulation Results		Value	Log
Brake Reaction Time Performance		Value	
Reaction Time, Trial 1 =			
Total pedal reaction time (seconds) =		1.53	
Gas pedal reaction time (seconds) =		1.03	
Stopping distance (feet) =		233.68	
Speed at stimulus (miles/hour) =		49.73	
Reaction Time, Trial 2 =			
Total pedal reaction time (seconds) =		1.03	
Gas pedal reaction time (seconds) =		0.00	
Stopping distance (feet) =		183.33	
Speed at stimulus (miles/hour) =		51.75	
Reaction Time, Trial 3 =			
Total pedal reaction time (seconds) =		1.57	
Gas pedal reaction time (seconds) =		0.70	
Stopping distance (feet) =		226.90	
Speed at stimulus (miles/hour) =		52.11	
Reaction Time, Trial 4 =			
Total pedal reaction time (seconds) =		1.47	
Gas pedal reaction time (seconds) =		1.00	
Stopping distance (feet) =		194.31	
Speed at stimulus (miles/hour) =		45.63	
Reaction Time, Trial 5 =			
Total pedal reaction time (seconds) =		1.20	
Gas pedal reaction time (seconds) =		0.53	



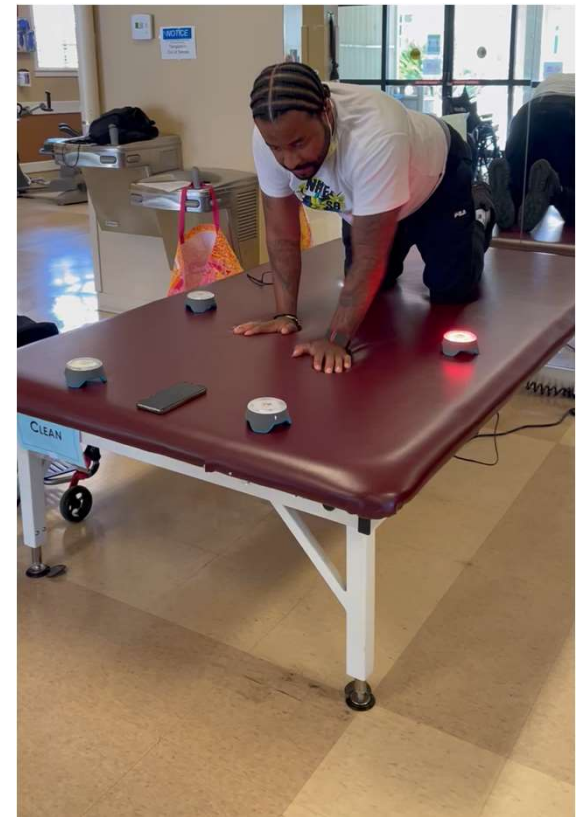
SMARTFIT

TECHNOLOGY FOR MOTOR AND COGNITIVE RECOVERY



BLAZEPODS

TECHNOLOGY FOR MOTOR AND COGNITIVE RECOVERY



IDEAL CANDIDATE FOR TLC

IDEAL CANDIDATE

Brain injury, stroke, spinal cord injury, multi-trauma

Can tolerate 6 hours of therapy per day

Require interdisciplinary team approach

Need physician involvement

Requires training for community re-integration



CASE STUDY

JULIANA

Background

Juliana is a 28-year-old woman who was found unconscious by her husband when the horse she was riding returned back to the stable without her. She was comatose upon arrival, found to have a skull fracture in the septal region as well as bilateral frontal contusions. The patient was intubated, sedated and mechanically ventilated, for 5 days. Once medically stabilized, she was referred to acute rehabilitation. She was noted to have poor balance, dizziness, endurance, headaches, impulsivity and delayed executive functioning. She returned home with her husband after 1 week in acute rehabilitation. Prior to her accident, Juliana was working full time as a program manager for Loan Depot. Her goals are to return to work, driving, and horseback riding.

CASE STUDY

JULIANA

Presentation

Juliana was admitted to TLC Day Treatment program, receiving 5 hours of therapy, 3 days per week.

Initial Presentation

Occupational Therapy

L eye asymmetry

Photosensitivity -Can only tolerate being on phone for 30 min

Maximum assistance for all IADL

Physical Therapy

Impaired endurance

Poor balance

Poor agility- inability to run/hop

Speech Therapy

Decreased Processing Speed

Poor tolerance to community

Blunted affect

CASE STUDY

JULIANA

Treatment

Juliana received 5 hours of therapy per day, 3 days per week

Occupational Therapy

Vision Therapy

Driving Training

Physical Therapy

High level balance/agility

Return to prior fitness activity

Speech Therapy

Planning Tasks

Return to work

Reintegration into the Community

CASE STUDY

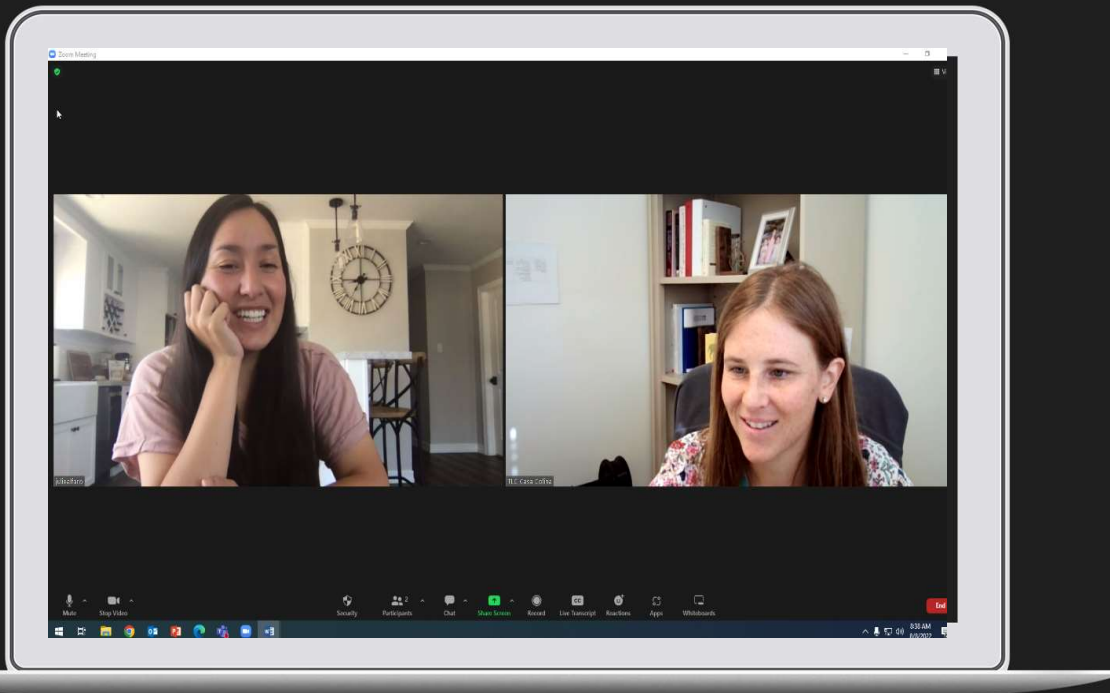
JULIANA

Advanced Day Treat

Juliana transitioned to 2 days per week at home and 1 day on campus to continue driver training.

Advanced Day Treatment:

- In home assessment with family
- Coached through creation and execution of productive day that included components of fitness, home/family responsibilities, return to work tasks, self-care, and social re-integration
- Assignment for return to work tasks
- Individual neuropsychology and couple counseling



THANK
YOU!

FOR MORE INFORMATION

909/596-7733, ext. 4129

rtran@casascolina.org
