



# Novel Approaches for Identification and Support of Justice-Involved Individuals with Brain Injury

UNIVERSITY of DENVER



Drew Nagele, Psyd, CBIST, Kim Gorgens, PhD, ABPP, Judy Dettmer, CDHS, and Nimi Oduleye Beechwood NeuroRehab

University of Denver

Colorado Brain Injury Program

University of Denver

## Introduction

A disproportionate number of youth and adults with Acquired Brain Injury (ABI) are involved in the criminal justice system. Without appropriate screening, treatment and community interventions, these individuals often re-offend and their level of involvement in the criminal justice system escalates. Historically, criminal justice reform has focused on efforts to influence an individual's thinking and attitudes - to help them understand the consequences of their behavior, to make restitution, to learn pro-social behaviors. However, such approaches generally fail to appreciate that individuals may have differences in their capacity to benefit from standardized interventions - especially if they have had an acquired brain injury. This poster highlights the progressive efforts in two states - Colorado and Pennsylvania - to make traditional interventions more effective using identification, neuropsychological screening, specialty interventions and community involvement.

## Pennsylvania Model

NeuroResource Facilitation for Prison Inmates with Brain Injury to Improve Re-Entry

#### **Adult Project Goals:**

- Identify inmates who have brain injury
- Plan and develop services that will help them to be successful upon release from prison
- Coordinate with Re-Entry staff (Corrections, Parole, Voc Rehab)
- Follow up post-release to ensure implementation of the plan

#### **ACL: Common Barriers to Access to TBI Care**

- The absence of a TBI diagnosis or the assignment of an incorrect diagnosis
- A shortage of healthcare professionals who have training in TBI (specifically, an ability to identify TBI and treat the resulting symptoms)
- Lack of information regarding available services and supports
- TBI services spread across a variety of agencies resulting in services being difficult for families to find and/or navigate

#### **Juvenile Project Goals**

Provide brain injury education, training and consultation to:

- Detention Center Staff
- Families
- Schools /BrainSTEPS
- Probation Officers
- Residential Treatment Facilities
- Community Providers
- Link to Voc Rehab

#### **Specific Objectives**

- 2. Identify youth with brain injury through screening and neurocognitive testing
- 3. Utilize information gleaned from neurocognitive evaluation activities to plan and guide the delivery of interventions that will best address the needs of students with cognitive impairments
- 4. Provide NeuroResource Facilitation to make connections to brain injury resources in the community

#### Screening for history of brain injury

OSU-TBI-ID (Corrigan & Bogner, 2007)

## Colorado Model

#### **ACL Grant**

- Target sites:
- Three County Jail settings
- Two Problem Solving Courts (Drug/Veteran)
  - Expanding to 6 additional sites
- Three Probation settings (adult sex offender, adult female population, and juvenile probation)
- Six state operated Division of Youth Corrections sites

#### **Three Primary Goals**

- Screen for brain injury (both lifetime history and neuropsychological deficits)
- 2. Refer individuals who are screened positive for brain injury history and impairment for resource facilitation and case management support
- 3. Build the capacity of criminal justice personnel and inmates/probationers to better understand brain injury

#### **Screening for Lifetime History**

 Ohio State University Traumatic Brain Injury Identification method modified (OSU TBI-ID; Corrigan & Bogner, 2007)

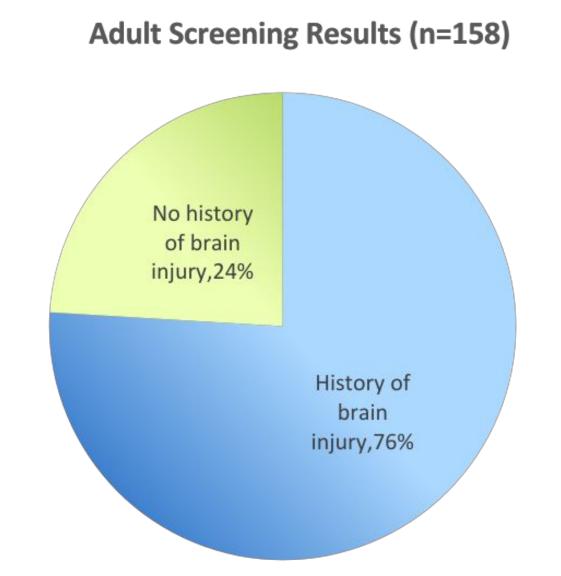
#### Screening for Neuropsychological Impairment

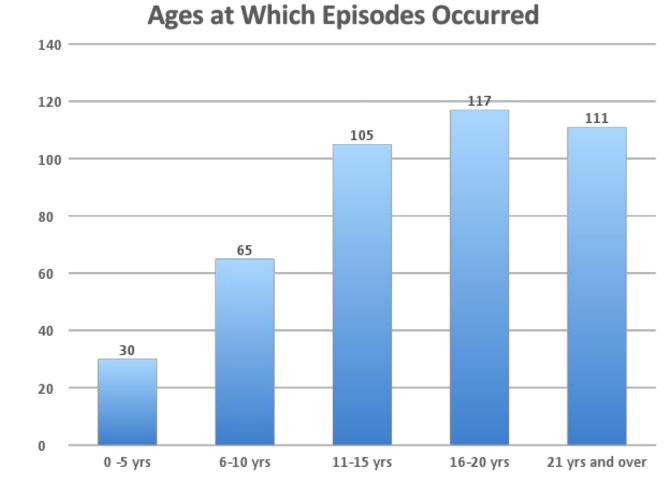
- Student Clinicians supervised by Clinical Psychologist
- Three effort tests, structured interview
- Automated Neuropsychological Assessment Measure (ANAM)
   Core Battery (Reeves, Winter, Bleiberg, & Kane, 2007) to screen for deficits that are consistent with brain injury
- Positive screen when scores are more than 2 standard deviations below the mean ("Clearly Below Average")
- Report and feedback

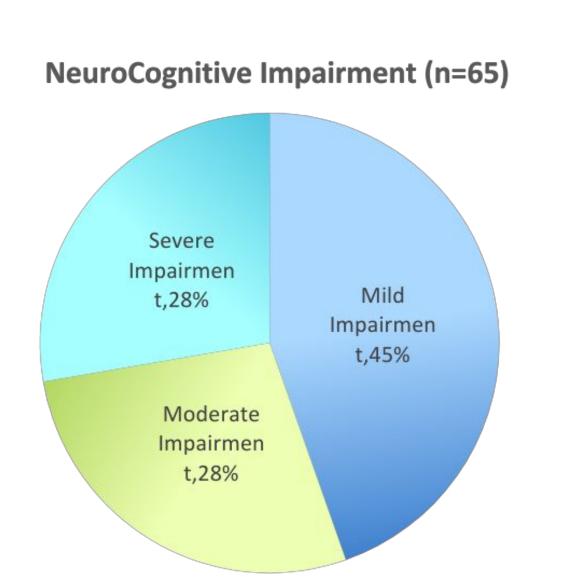
#### **Division of Youth Corrections**

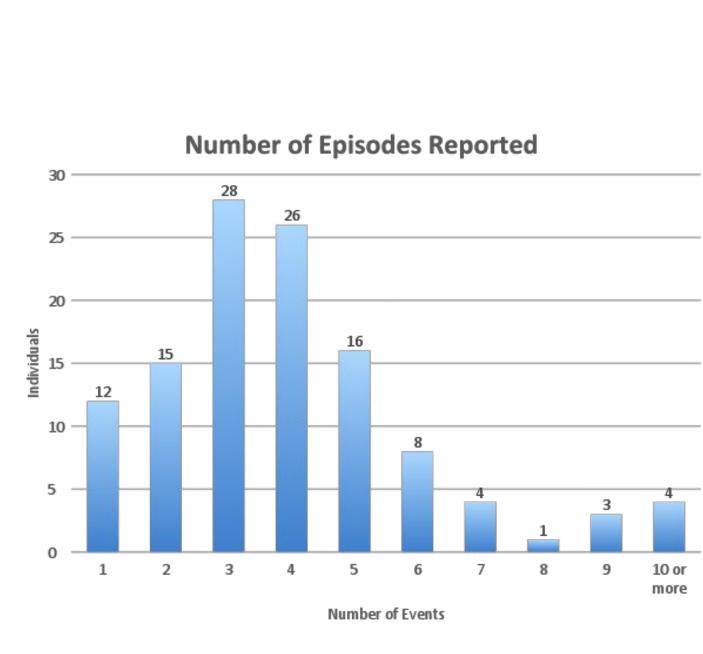
- 1. Screen for lifetime history: use tool they developed "CO Brain Injury Screening Questionnaire"
- 2. If screen positive, refer for neuropsych screen: WAIS/WISC, RBANS, SCT
- 3. If positive and complicated, refer for a full neuropsychological evaluation
- 4. Referred to BIAC when positive for lifetime history and when positive for deficits

## ta Results









#### **Juvenile Justice Current Results**

## Screening Demographics (n=321) Ages ranged from 12 years to 20

80% male, 20% female

#### Screening Outcomes

52% Positive History BI Event 48% No History BI Event Average # BI Events = 2.8 per juvenile

### Cognitive Testing Outcomes 58% demonstrated cognitive impairments

Overall level of Impairment

Mild Impairment – 52%

Moderate Impairment – 26%

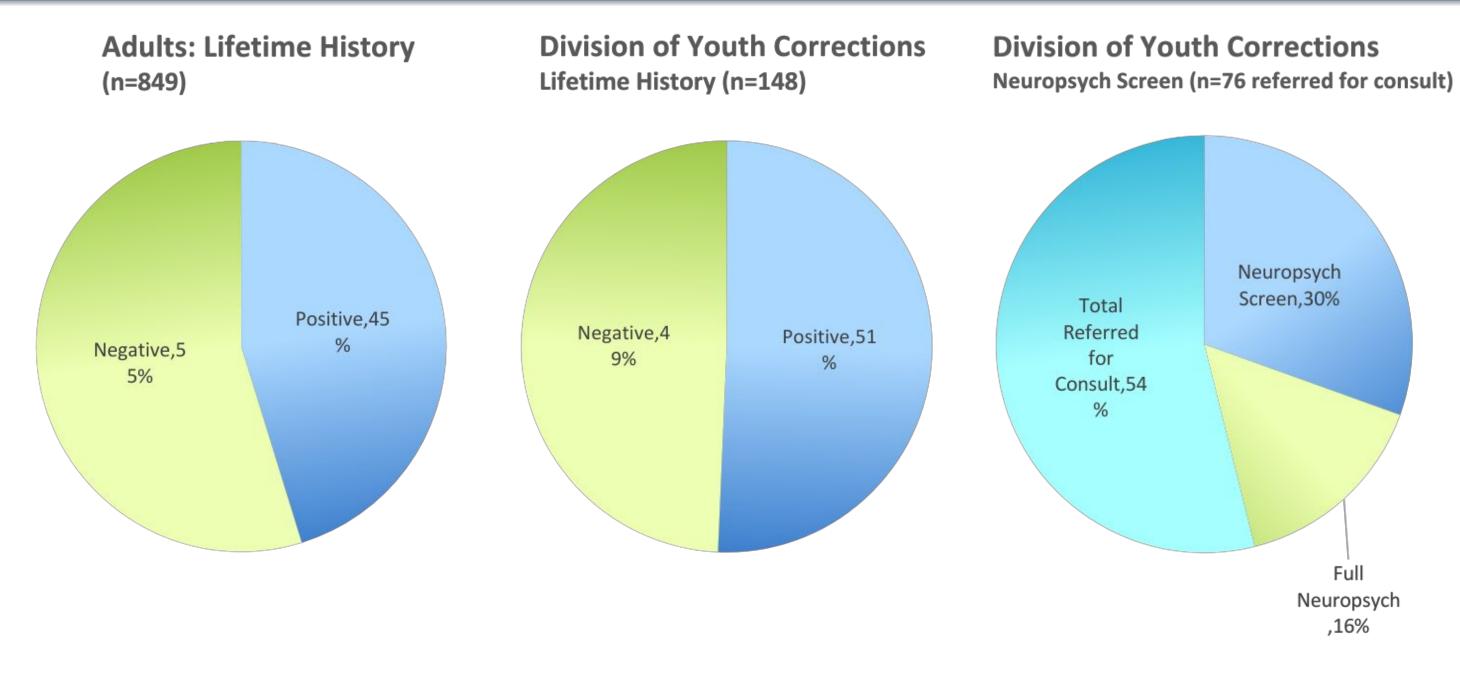
Severe Impairment – 22%

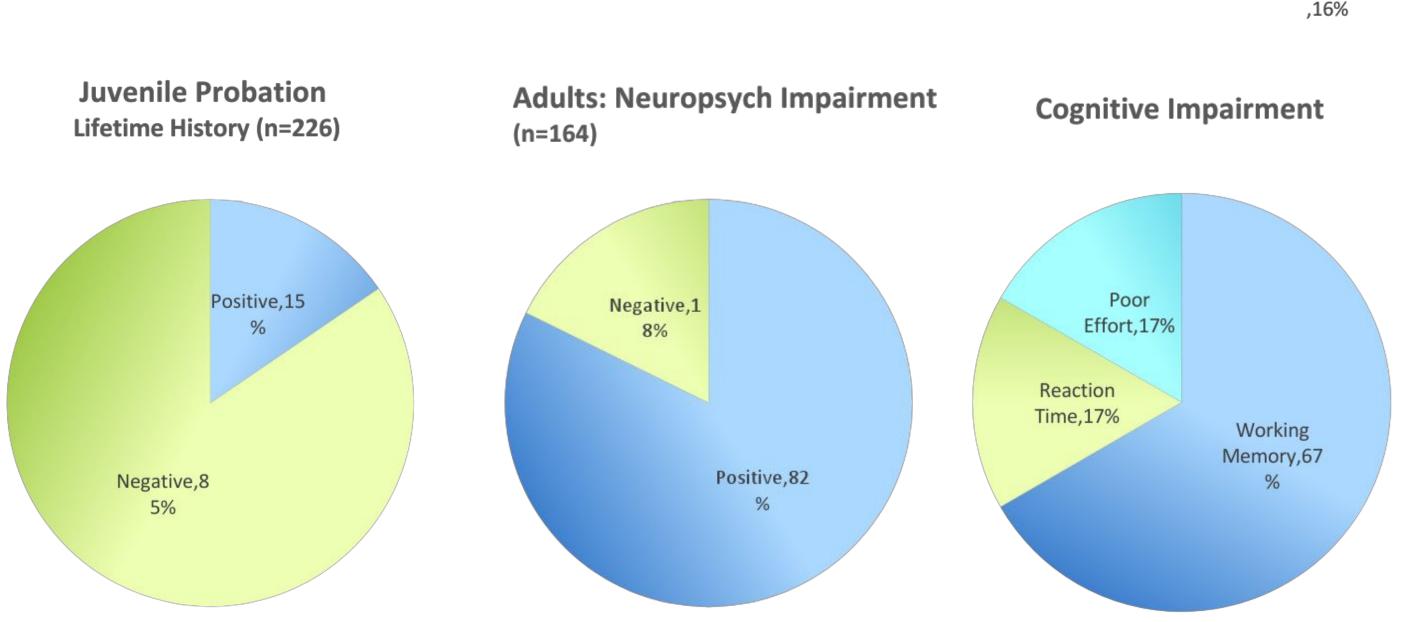
42% within normal limits

#### **Next Steps**

- Embed OSU-TBI-ID (Corrigan & Bogner, 2007) into Health Screening System used by contracted provider for most Juvenile Justice programs statewide
- Develop a program that can be embedded in Probation and implement statewide
- Make screening for brain injury a required service in schools, so that we can catch changes in brain function earlier, before they lead to drop out, substance abuse, and justice involvement

## Results Properties Division of Youth Corrections Juvenile Probation Overview





#### • O Caraona Campleted

- 9 Screens Completed
- All males
- Average age 16
- Average number of injuries=S4
- Average age of youngest injury=6 years

#### Division of Youth Corrections Overview

- Lifetime History screen = 353
- Screened positive = 141
- Referred for consult = 76
- Neuropsych screen = 43
- Neuropsychological evaluation = 22

#### Injuries Sustained in Childhood

- Age at time of injury
- Of 401 individuals screened, 301 sustained injuries before age of 21
- Not including DYC data
- Average age of youngest injury=9 years
- Average age at time of evaluation=37 years
- Demographics
- 209 males, 92 females
- 154 white, 68 Hispanic, 48 black, 11 Native Americans, 1 Native Hawaiian, 15 "mixed", 4 unknown