

Statement in support of Senate Bill 700

From: Dr. Lance Trexler

March 10, 2021

Impact of Resource Facilitation in Oregon

Incidence and Prevalence: Oregon had 2,778 hospitalizations for traumatic brain injury (TBI) in 2014, which is a rate of 64.1 per 100,000 in the population.¹ These findings clearly indicate that Oregon has a significant health care and social burden associated with TBI, particularly when considering that cognitive disability associated with brain injury is 1.3 times higher than intellectual disability, 1.35 times higher than Alzheimer's Disease, and 9 times higher than for stroke.²

TBI is a chronic condition: TBI can result in chronic disability associated with the primary effects of the injury (e.g., cognitive or neurobehavioral impairments), secondary co-morbid conditions (e.g., depression, substance abuse, and seizures), and increased health risks (e.g., higher rates of diabetes, pain, insomnia and fatigue, dementia, sleep disturbances, among many others).³ The CDC has now identified TBI as a chronic condition that should be managed through services such as Resource Facilitation.⁴

The majority of people with TBI do not have access to post-acute services or community-based supports owing to the absence of a system to manage TBI as a chronic condition. Thus, those with TBI are unnecessarily vulnerable to developing potentially preventable medical and psychosocial co-morbidities and institutionalization through hospitalization or incarceration. Consequently, health care cost increases over time, expenses for institutionalization fall on a variety of governmental agencies, and lost productivity of both the person with TBI and their family members increases societal cost. Implementation of a system to better manage moderate to severe TBI could positively impact all of these domains.

Oregon can Significantly Reduce Disability and Costs with Resource Facilitation: Resource Facilitation (RF) is an evidence-based intervention to manage TBI as a chronic condition that proactively helps the individual identify, obtain, and navigate needed brain injury and community supports and services specific to the person's needs. Our research^{5,6,7,8} has demonstrated that:

- **64-70% of those with TBI who received RF returned to work and school** as compared to 36-50% of those who did not;
- **RF resulted in a significant decrease in level of disability** on measures of abilities, adjustment, and participation in activities at home and in the community;
- RF resulted in a significant decrease in survivor perceived need for services and a significant decrease in the services being received; and
- People with TBI leaving incarceration who got **RF were significantly less likely to be rearrested/re-incarcerated** compared to those who did not (33% versus 54%).

Healthcare economists have studied the economic impact study of RF on Indiana⁹ and found that the annual aggregate lifetime savings generated as a result of Resource Facilitation for Indiana was **\$366.77 million in savings a year**, just considering the impact on vocational outcomes, that included \$249.1 million a year for wages and benefits, \$30.97 million a year for revenue from taxes, \$80.1 million a year for savings to SSDI/private disability, and \$6.6 million a year for SNAP. Oregon should achieve proportionately similar benefits once its Brain Injury Resource Facilitation program is developed.



RHI-CARMEL 12425 Old Meridian Street, Suite B2 Carmel, IN 46032 RHI-NORTHWEST BRAIN INJURY CENTER 9531 Valparaiso Court Indianapolis, IN 46268 RHI is a community collaboration between Indiana University Health and St. Vincent Health 317-329-2000 | rhin.com



St.Vincent

The Center on Brain Injury Research and Training at the University of Oregon is highly respected by both researchers and professionals as a resource for TBI research, training and advocacy. Their work has positively impacted the lives of people with TBI nationally and internationally. I have known David Kracke for over 3 years and he is well-recognized nationally for innovative and constructive advocacy that has also had an impact on state and federal policy related to TBI. **Oregon has the right team to provide Resource Facilitation and will do so based on the research and rigorous evaluation and accountability. For these reasons, and for the lives of those with brain injury, I urge you to pass this important legislation.**

Thank you.

MARTER (Rodon Al. 8)

Lance E. Trexler, PhD, HSPP, FACRM Clinical Neuropsychologist and Executive Director, Brain Injury Rehabilitation Research Rehabilitation Hospital of Indiana; Clinical Assistant Professor, Department of Physical Medicine and Rehabilitation, Indiana University School of Medicine; Fellow, American Congress of Rehabilitation Medicine 9531 Valparaiso Court Indianapolis, IN 46219 T: (317) 329-2411 | E: Lance.trexler@rhin.com

1) Daugherty J, Thomas K, Wazltzman D et al. (2020). State-level numbers and rates of traumatic brain injury-related emergency department visits, hospitalizations, and deaths in 2014. Journal of Head Trauma Rehabilitation, 35 (6), pp. E461-E468(8), DOI: <u>https://doi.org/10.1097/HTR.000000000000593</u>.

2) Hoehl JA & Sieh KA (2010). Cloud computing and disability communities: How can cloud computing support a more accessible information age and society? Silicon Flatirons Center, 2010, Available at: <u>https://ssrn.com/abstract=2285526</u> or <u>http://dx.doi.org/10.2139/ssrn.2285526</u>

3) Kumar, R.G., Juengst, S.B., Wang, Z et al (2017). Epidemiology of comorbid conditions among adults 50 years and older with traumatic brain injury. Journal of Head Trauma Rehabilitation, 33(1), 15-24.

4) Centers for Disease Control and Prevention. *Moderate to Severe Traumatic Brain Injury is a Lifelong Condition* [Fact sheet]. Atlanta, GA: National Center for Injury Prevention and Control; Division of Unintentional Injury Prevention.

5) Trexler, L.E., Trexler, L.C., Malec, J.F., Klyce, D., & Parrott, D. (2010). Prospective randomized controlled trial of resource facilitation on community participation and vocational outcome following brain injury. *Journal of Head Trauma Rehabilitation*, 25(6), 440-446.

6) Trexler, L.E., Parrott, D.R., & Malec, J.F. (2016). Replication of a Prospective Randomized Controlled Trial for Resource Facilitation to Improve Return to Work after Brain Injury. *Archives of Physical Medicine and Rehabilitation*, 97(2), 204-210.

7) Trexler, L.E. & Parrott, D.R (2018). Models of Brain Injury Vocational Rehabilitation: The Evidence for Resource Facilitation from Efficacy to Effectiveness. *Journal of Vocational Rehabilitation*, 49(2), 195-203. https://doi.org/10.3233/JVR-180965

8) Trexler, L.E. & Parrott, D.R (manuscript submitted). The impact of resource facilitation on recidivism for individuals with traumatic brain injury.