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I create these resources with the intended use of them being educational and advocational for individuals with limb loss and prosthetic devices and the occupational therapy profession as a whole. It is expected these products will be shared both in print form and electronically, as well as posted in public settings as appropriate.

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If you notice any typos or mistakes or have any questions please feel free to email me directly at otunlimbited@gmail.com.

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Hold on to Hope!

Tori Martin



Individuals undergo an amputation a year

(Ziegler-Graham et al., 2008)



Occupational therapy is a profession dedicated to assisting individuals in increasing their success and satisfaction when performing all occupations of life.

Occupational therapists are professionals who assist individuals in creating a life where they actively participate in all activities that they find meaningful — these can be needs such as dressing, bathing, toileting, or wants such as gardening, golfing, or playing bingo.

(AOTA, 2016; Wressle & Sammelsson, 2004)







## 1.6 MILLION

Individuals living with limb loss in the U.S.

expected to MORE than DOUBLE by 2050, predicted to rise to ~3.6 Million

(Ziegler-Graham et al., 2008)

# ROLE & BENEFITS

#### PHYSICAL IMPACTS

- + Address physical changes affecting occupational participation at home, in the workplace, and within the community
- + Focus on strength, range of motion, and movement patterns

(Day et al., 2019; Melcer et al., 2016)

### PSYCHOSOCIAL IMPACTS

- + Address the neural changes that impact motor planning, execution, and learning
- + Provide and implement appropriate coping strategies

(Wheaton, 2017)

### **ECONOMIC IMPACTS**

- + Address and reduce return to hospital rates, device abandonment rates, and depression rates
- + Educate on device uses, help
  determine need and most appropriate
  device, create wear schedule, and
  address co-morbidities

(Resnik et al., 2012; Boone, 2019)



## 1 IN 10

Individuals with limb loss reported not receiving proper medical care when needed

Resulting in...

Decreased Independence

Impaired Quality of Life

Higher

Caregiver Burden

(Amputee Coalition, n.d; Laurie & Mandacina, 2018)

# THERAPEUTIC PHASES

## ACUTE PHASE

Identify client-centered short- and long-term goals

# PRE-PROSTHETIC TRAINING

Prepare clients for fitting and optimal use of prosthesis

## BASIC PROSTHETIC TRAINING

Monitor ability to perform specific activities, provide modifications, and provide support for coping

## ADVANCED PROSTHETIC

TRAINING
Integration of prosthesis into
more advanced activities

Gulick, 2016

American Occupational Therapy Association. (2016). Occupational therapy's distinct value: Rehabilitation practice. https://www.aota.org/~/media/Corporate/Files/Secure/Practice/distinct-value-rehab.pdf

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Wheaton, L. (2017). Neurorehabilitation in upper limb amputation: Understanding how neurophysiological changes can affect functional rehabilitation. Journal of Neuroengineering and Rehabilitation, 14(1), 1-12. doi:10.1186/s12984-017-0256-8

Wressle E, & Samuelsson K. (2004). Barriers and bridges to client-centered occupational therapy in Sweden. Scandinavian Journal of Occupational Therapy, 11(1), 12—16. https://doi.org/10.1080/11038120410019135



~185,000

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### References

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