# Communicating Research to the General Public

The WISL Award for Communicating PhD Research to the Public launched in 2010, and since then over 100 Ph.D. degree recipients have successfully included a chapter in their Ph.D. thesis communicating their research to non-specialists. The goal is to explain the candidate's scholarly research and its significance—as well as their excitement for and journey through their area of study—to a wider audience that includes family members, friends, civic groups, newspaper reporters, program officers at appropriate funding agencies, state legislators, and members of the U.S. Congress.

WISL encourages the inclusion of such chapters in all Ph.D. theses everywhere, through the cooperation of PhD candidates, their mentors, and departments. WISL offers awards of \$250 for UW-Madison Ph.D. candidates in science and engineering. Candidates from other institutions may participate, but are not eligible for the cash award. WISL strongly encourages other institutions to launch similar programs.



The dual mission of the Wisconsin Initiative for Science Literacy is to promote literacy in science, mathematics and technology among the general public and to attract future generations to careers in research, teaching and public service.

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Occupational Therapy's Role Supporting Patients

with Excess Body Weight within Primary Care

Bу

Chloe E. Muntefering

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Kinesiology)

at the

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The dissertation is approved by the following members of the Final Oral Committee: Beth Fields, Assistant Professor, Kinesiology Jeanette Reffstrup Christensen, Associate Professor, Public Health, University of Southern Denmark Susan Andreae, Assistant Professor, Kinesiology Hailey Love, Assistant Professor, Rehabilitation Psychology and Special Education Corrine Voils, Professor, Surgery

#### **CHAPTER SIX: COMMUNICATING THIS RESEARCH WITH THE PUBLIC**

The Wisconsin Initiative for Science Literacy (WISL) encourages PhD candidates to include a chapter in their dissertation communicating their research with non-specialists. The goal is to explain the candidate's scholarly research and its significance to a broader audience, including family members, friends, civic groups, newspaper reporters, program officers at appropriate funding agencies, state legislators, and members of the U.S. Congress.

I have previously utilized infographics as a medium for efficient communication of research findings with key non-specialist stakeholders. Therefore, I chose to work with graphic designer Katie Caspero from OT Graphically to visually translate my dissertation into an infographic for concise, understandable dissemination to the public. I wholeheartedly believe that more creative dissemination methods are needed within science so that research findings don't remain hidden behind paywalls and scientific jargon. I am eager to respond to the WISL initiative and share my research findings with diverse audiences through this infographic. I plan to share this infographic in my finalized dissertation, (2) distribution of this infographic to occupational therapists and healthcare providers at various professional conferences, (3) sharing this infographic via social media with relevant audiences, and (4) using components of this infographic when having future discussions with healthcare payers about coverage for preventative services.

I extend my appreciation to the WISL staff for mentoring me through the creation of this non-scientific chapter. Thank you especially to Elizabeth Reynolds and Cayce Osborne for their instrumental feedback on this work. Occupational Therapy's Role Supporting Patients with Excess Body Weight within Primary Care

### **MY RESEARCH INSPIRATION**

"I've worked as an occupational therapist for 8 years with diverse patient populations. Despite the variety of individuals that I have worked with, weight management struggles have been a common theme for patients and families I have worked with.

> In 2018, I was diagnosed with Type 1 Diabetes and experienced the gaps in preventative healthcare firsthand. Throughout both personal and professional experiences, the need for more proactive interventions to support living full and healthy lives has become widely apparent to me."



Chloe Muntefering, MS, OTR/L Occupational Science PhD Candidate

#### THE PROBLEM



Excess body weight (overweight/obesity) affects **3 in 4 adults** in the US



Excess body weight increases the likelihood of heart disease, diabetes, arthritis, disability, and activity limitations



#### \$260.6 billion

in annual healthcare spending

\$6.38 billion

national loss of annual productivity

## NEED FOR CHANGE



Weight concerns are often addressed only **after** obesity is diagnosed

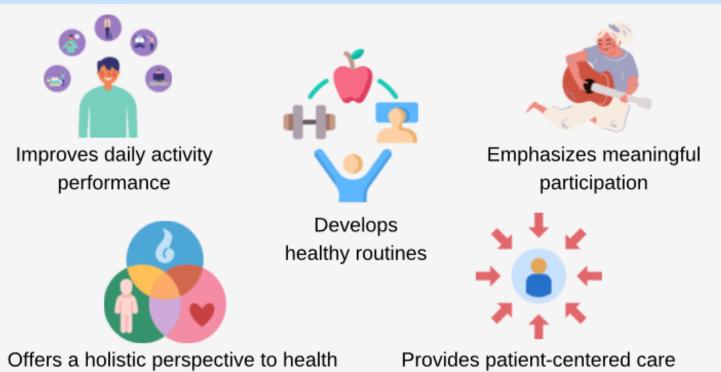


Less than 3% of adults receive preventative services to help maintain their current weight

Preventative weight management care could help patients avoid future weight-related health issues

## OCCUPATIONAL THERAPY (OT) AS A POTENTIAL SOLUTION

OT has the following expertise that could offer new and unique approaches in adult preventative weight management:



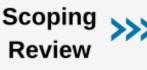
## **RESEARCH OVERVIEW**

**Overall Research Purpose:** 

To explore and advance the role of occupational therapy in the prevention of excess body weight in adults

My dissertation involved the following three research studies to answer this research purpose:





Mixed Methods

### Methods

Combined numerical data (from surveys of OTs) and verbal descriptions (from interviews of OTs) to form conclusions about OT's current role in the prevention of excess body weight

### Methods

Participatory

Research

Involved relevant community members (occupational therapists) in five research design sessions to create a screening tool for patients with weight management concerns

#### Findings

Methods

Reviewed existing research on

excess body weight to

adult preventative treatments for

summarize the current nature of

such types of interventions



- Existing examples of preventative care interventions most often occured outside of the US
- Treatments often focus on a single factor (diet or exercise), with a lack of holistic care
- OTs were not involved in any of the research addressing preventative care of excess body weight

#### Findings



- There is a hesitancy among OTs to discuss weight management that needs to be overcome to appropriately serve patients with weight management concerns
- OTs focus on participation in meaningful activities versus weight loss
- Lack of ideal OT weight management assessments

#### Outcome



- Our team developed the Occupational Therapy Health Routines Screening Tool
- This tool can be used by various healthcare providers to identify risky lifestyle patterns and to determine patients who may benefit from OT to support weight management

## **KEY TAKEAWAYS**



Current healthcare for adults with excess body weight is reactive, fragmented, and demonstrates limited success

Occupational Therapists have a unique focus for the prevention of excess body weight because their expertise is concerned with meaningful activity engagement and not just a number on a scale, offering a more holistic perspective on weight

Occupational Therapy Health Routines Screening Tool could help in identifying and addressing unhealthy lifestyle patterns to support improved weight management for patients

### FUTURE DIRECTIONS

- Research should continue exploring holistic and sensitive ways to address weight in healthcare
- Interventions and assessments should be developed that move beyond focusing solely on weight and BMI, to capturing the complexity of human health





Download the screening tool

