INSTRUCTIONS

- **This form is only for studies that will be reviewed by the UW IRB**. Before completing this form, check HSD's website to confirm that this should not be reviewed by an external (non-UW) IRB.
- **If you are requesting a determination** about whether your activity is human subjects research or qualifies for exempt status, you may skip all questions except those marked with a ( ). For example (**1.1**) must be answered.
- **Answer all questions**. If a question is not applicable to your research or if you believe you have already answered a question elsewhere in the application, state "NA" (and if applicable, refer to the question where you provided the information). If you do not answer a question, the IRB does not know whether the question was overlooked or whether it is not applicable. This may result in unnecessary "back and forth" for clarification. Use non-technical language as much as possible.
- To check a box, place an "X" in the box. To fill in a text box, make sure your cursor is within the gray text box bar before typing or pasting text.
- The word "you" refers to the researcher and all members of the research team, unless otherwise specified.
- For collaborative research, describe only the information that is relevant to you unless you are requesting that the UW IRB provide the review and oversight for your collaborators as well.
- You may reference other documents (such as a grant application) if they provide the requested information in non-technical language. Be sure to provide the document name, page(s), and specific sections, and upload it to ***Zipline***. Also, describe any changes that may have occurred since the document was written (for example, changes that you've made during or after the grant review process). In some cases, you may need to provide additional details in the answer space as well as referencing a document.

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1 OVERVIEW

Study Title:

Efficacy of a Telehealth Pain Self-Management Intervention in Employed Adults with Physical Disability: A Randomized Controlled Trial

1.1 Home institution. Identify the institution through which the lead researcher listed on the IRB application will conduct the research. Provide any helpful explanatory information.

In general, the home institution is the institution (1) that provides the researcher's paycheck and that considers him/her to be a paid employee, or (2) at which the researcher is a matriculated student. Scholars, faculty, fellows, and students who are visiting the UW and who are the lead researcher: identify your home institution and describe the purpose and duration of your UW visit, as well as the UW department/center with which you are affiliated while at the UW.

Note that many UW clinical faculty members are paid employees of non-UW institutions.

*The UW IRB provides IRB review and oversight for only those researchers who meet the criteria described in the **POLICY: Use of the UW IRB.***

The PI is housed out of University of Washington. We are collaborating with people from Northwestern University and the Shirley Ryan AbilityLab.

1.2 Consultation history. Have you consulted with anyone at HSD about this study?

It is not necessary to obtain advance consultation. If you have: answering this question will help ensure that the IRB is aware of and considers the advice and guidance you were provided.

☐ **No**
☒ **Yes** → If yes, briefly describe the consultation: approximate date, with whom, and method (e.g., by email, phone call, in-person meeting).

Study coordinator Carolyn Green spoke with Bailey Bodell over the phone on 6/11/2020 about establishing separate IRBs versus a single IRB of record.

1.3 Similar and/or related studies. Are there any related IRB applications that provide context for the proposed activities?

Examples of studies for which there is likely to be a related IRB application: Using samples or data collected by another study; recruiting subjects from a registry established by a colleague's research activity; conducting Phase 2 of a multi-part project, or conducting a continuation of another study; serving as the data coordinating center for a multi-site study that includes a UW site.

Providing this information (if relevant) may significantly improve the efficiency and consistency of the IRB's review.

☐ **No**
☒ **Yes** → If yes, briefly describe the other studies or applications and how they relate to the proposed activities. If the other applications were reviewed by the UW IRB, please also provide: the UW IRB number, the study title, and the lead researcher's name.

We are using the model from the "Telephone Intervention for Pain Study, "TIPS," by Dawn Ehde but adapting it for persons with disability who are employed.

1.4 Externally-imposed urgency or time deadlines. Are there any externally-imposed deadlines or urgency that affect your proposed activity?

HSD recognizes that everyone would like their IRB applications to be reviewed as quickly as possible. To ensure fairness, it is HSD policy to review applications in the order in which they are received. However, HSD will assign a higher priority to research with externally-imposed urgency that is beyond the control of the researcher. Researchers are encouraged to communicate as soon as possible with their HSD staff contact person when there is an urgent situation (in other words, before submitting the IRB application). Examples: a researcher plans to test an experimental vaccine that has just been developed for a newly emerging epidemic; a researcher has an unexpected opportunity to collect data from students when the end of the school year is only four weeks away.

HSD may ask for documentation of the externally-imposed urgency. A higher priority should not be requested to compensate for a researcher's failure to prepare an IRB application in a timely manner. Note that IRB review requires a certain minimum amount of time; without sufficient time, the IRB may not be able to review and approve an application by a deadline.

[ ] **No**
[X] **Yes** → If yes, briefly describe the urgency or deadline as well as the reason for it.

We will not receive funding until the IRB is approved.

1.5 Objectives Using lay language, describe the purpose, specific aims, or objectives that will be met by this specific project. If hypotheses are being tested, describe them. You will be asked to describe the specific procedures in a later section.

If your application involves the use of a HUD "humanitarian" device: describe whether the use is for "on-label" clinical patient care, "off-label" clinical patient care, and/or research (collecting safety and/or effectiveness data).

Aim 1: **Evaluate the efficacy of the telehealth pain self-management intervention, adapted for employees with physical disability, ("E-TIPS"), relative to a waitlist control in reducing pain interference (primary outcome) in adults with chronic pain and physical disability.**
Hypothesis 1.1. Participants randomized to E-TIPS will report greater improvements in pain interference (primary outcome, measured by PROMIS Pain Interference Scale) compared to participants assigned to control at post-treatment (12 weeks post-randomization, primary endpoint).
Hypothesis 1.2. Improvements in pain interference will be maintained at 6 mo. post randomization.

Although the long-term goal is to promote job retention and enhance employment in employees with chronic pain, we chose pain interference as the primary outcome due to its high association with disability and our ability to detect meaningful change within the study timeframe. We will conduct exploratory analyses to determine whether reductions in pain interference are associated with fewer missed days of work and other employment outcomes.

Aim 2: **Examine the effects of E-TIPS compared to control on secondary outcomes relevant to work, including self-efficacy for pain management, pain intensity, fatigue, mood, and days worked at 12 weeks post-treatment and maintenance of effects at 6-month follow up.**
Hypothesis 2.1. Participants randomized to E-TIPS will report greater short-term (post-treatment) improvements in secondary outcomes compared with control.
Hypothesis 2.2. Participants assigned to E-TIPS will retain treatment benefits at 6-months.
Hypothesis 2.3. Within-subject outcome changes during the 12-week intervention period will be greater than during the waitlist time period.

Aim 3: **Evaluate factors, including treatment adherence, treatment satisfaction, and barriers/facilitators of implementation relevant to future dissemination and large-scale**

implementation of E-TIPS in employed individuals with physical disabilities and chronic pain. We will collect measures of treatment adherence, satisfaction, and convenience from participants allocated to E-TIPS. We will assess barriers and facilitators to implementation from the participants' perspectives by collecting information about other factors that influence participation.
Hypothesis 3.1. Participants allocated to E-TIPS will demonstrate high treatment adherence (defined as attending > 6/8 sessions) and report being highly satisfied with the treatment (> 8 on 0-10 numeric rating scale).

1.6 Study design. Provide a one-sentence description of the general study design and/or type of methodology.

Your answer will help HSD in assigning applications to reviewers and in managing workload. Examples: a longitudinal observational study; a double-blind, placebo-controlled randomized study; ethnographic interviews; web scraping from a convenience sample of blogs; medical record review; coordinating center for a multi-site study.

We propose a randomized (1:1), single blind parallel-group trial comparing the TIPS telehealth pain self-management intervention, adapted to address employment issues (E-TIPS), to a waitlist control in adults with physical disabilities and chronic pain who are employed.

1.7 Intent. Check all the descriptors that apply to your activity. You must place an "X" in at least one box.

This question is essential for ensuring that your application is correctly reviewed. Please read each option carefully.

	Descriptor
☐	1. Class project or other activity whose purpose is to provide an educational experience for the researcher (for example, to learn about the process or methods of doing research).
☐	2. Part of an institution, organization, or program's own internal operational monitoring.
☐	3. Improve the quality of service provided by a specific institution, organization, or program.
☒	4. Designed to expand the knowledge base of a scientific discipline or other scholarly field of study, and produce results that: • Are expected to be applicable to a larger population beyond the site of data collection or the specific subjects studied, or • Are intended to be used to develop, test, or support theories, principles, and statements of relationships, or to inform policy beyond the study.
☐	5. Focus directly on the specific individuals about whom the information or biospecimens are collected through oral history, journalism, biography, or historical scholarship activities, to provide an accurate and evidence-based portrayal of the individuals.
☐	6. A quality improvement or program improvement activity conducted to improve the implementation (delivery or quality) of an accepted practice, or to collect data about the implementation of the practice for clinical, practical, or administrative purposes. This does not include the evaluation of the efficacy of different accepted practices, or a comparison of their efficacy.
☐	

☐ 7. Public health surveillance activities conducted, requested, or authorized by a public health authority for the sole purpose of identifying or investigating potential public health signals or timely awareness and priority setting during a situation that threatens public health.

☐ 8. Preliminary, exploratory, or research development activities (such as pilot and feasibility studies, or reliability/validation testing of a questionnaire)

☐ 9. Expanded access use of a drug or device not yet approved for this purpose

☐ 10. Use of a Humanitarian Use Device

☐ 11. Other. Explain:

1.8 Background, experience, and preliminary work. Answer this question **only** if your proposed activity has one or more of the following characteristics. The purpose of this question is to provide the IRB with information that is relevant to its risk/benefit analysis.

- Involves more than minimal risk (physical or non-physical)
- Is a clinical trial, or
- Involves having the subjects use a drug, biological, botanical, nutritional supplement, or medical device.

"Minimal risk" means that the probability and magnitude of harm or discomfort anticipated in the research are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

a. Background. Provide the rationale and the scientific or scholarly background for your proposed activity, based on existing literature (or clinical knowledge). Describe the gaps in current knowledge that your project is intended to address.

This should be a plain language description. Do not provide scholarly citations. Limit your answer to less than one page, or refer to an attached document with background information that is no more than three pages long.

Chronic pain is one of the most prevalent, disabling, and persistent comorbid conditions associated with physical disabilities, including LL, SCI, TBI, and chronic neurodegenerative conditions such as MS and PD.[12] One-half to two-thirds of adults with these conditions experience chronic pain.[12,16,18-20] In addition to being associated with disability,[8,9] depression, [21,22] sleep disruption, and physical inactivity,[11-14,84-89]chronic pain has deleterious social and societal costs, including job loss and reliance on long-term disability programs.[9,10] [11]

Analgesic medications rarely provide adequate pain relief for people with chronic pain and physical disabilities[24,30-35] and often have undesirable side-effects such as sedation or abuse disorders, which affect job performance and retention.[36,37] Thus, people with physical disabilities are increasingly interested in nonpharmacological approaches to pain management.[82] Paralleling this trend, pain self-management, based on cognitive behavioral theory (CBT) intervention strategies, is recognized increasingly as a valuable treatment for chronic pain and its effects on function, including for those with physical disabilities.[83-86] Multiple meta-analyses have concluded that CBT is efficacious in reducing pain severity and interference and in improving functon in adults and children across a wide range of conditions.[40,93] A National Academies of Sciences, Engineering,

and Medicine consensus report on pain management and the opioid epidemic[8] concluded that nonpharmacologic interventions for pain, including physical therapy, exercise, CBT, and meditation may provide effective pain relief instead of, or in combination with medication.

b. Experience and preliminary work. Briefly describe experience or preliminary work or data (if any) that you or your team have that supports the feasibility and/or safety of this study.

It is not necessary to summarize all discussion that has led to the development of the study protocol. The IRB is interested only in short summaries about experiences or preliminary work that suggest the study is feasible and that risks are reasonable relative to the benefits. Examples: You have already conducted a Phase 1 study of an experimental drug which supports the Phase 2 study you are now proposing to do; you have already done a small pilot study showing that the reading skills intervention you plan to use is feasible in an after-school program with classroom aides; you have experience with the type of surgery that is required to implant the study device; you have a study coordinator who is experienced in working with subjects who have significant cognitive impairment.

Ground-breaking research conducted by Dr. Ehde's team supports the use of self-management interventions for chronic pain in people with physical disabilities. She has conducted multiple RCTs that demonstrated the benefits of CBT-based self-management interventions for reducing pain in adults with LL,[87,88] MS,[83,85,88,89] SCI,[88] and TBI.[90] Other outcomes relevant to employment also improved, such as reductions in pain interference, depression, and fatigue, and increases in self-efficacy for managing pain. Across these trials, pain self-management interventions resulted in clinically meaningful reductions in pain intensity for 33%[91] to 47% of participants.

Pain self-management interventions are underutilized, both in the general population and in people with physical disabilities.[31,32,35] One of the biggest barriers to their use is reliance on face-to-face delivery, in a clinical setting, during business hours, which limits access to people with physical disabilities who are employed. They must take time off to attend multiple treatment sessions, overcome transportation barriers, and contend with the stigma of seeking behavioral healthcare. In addition, an insufficient number of clinicians are trained in behavioral pain interventions for individuals with physical disabilities.[40]

Telehealth has considerable potential for expanding the reach of pain self-management interventions in employed people with physical disabilities. Remote technology can transcend geographical barriers and target larger populations. These approaches also have inherent scalability and are easy to centralize for public health dissemination.[42] Remote delivery can reduce stigma and lower the threshold for treatment initiation, given that it can be used in the privacy of one's home. Telehealth approaches are also less expensive than traditional psychotherapy.[42]

Dr. Ehde's team has conducted a series of RCTs demonstrating the efficacy and acceptability of telehealth interventions in diverse populations; for example, an 8-session, 1:1, telephone intervention resulted in significant reductions in pain, fatigue, and depressive symptoms in more than half of study participants with MS.[83] Benefits were maintained at 6- and 12-months, and treatment adherence and satisfaction were high – 88% of participants completed all 8 sessions and 94% completed at least 4.

Dr. Ehde recently completed an RCT (N=188) on the efficacy of a telehealth pain self-management intervention (Telephone Intervention for Pain Study, "TIPS").[88] Participants with MS, SCI, or LL were assigned randomly to either TIPS or a pain education intervention. All participants received 8, 45-minute individual sessions delivered telephonically by postdoctoral psychology fellows or psychologists. Participants allocated to TIPS had a statistically significant decrease in

average pain intensity from pre- to post-treatment; further reductions in average pain intensity were observed at 6- and 12-month. Furthermore, 36% of those assigned to TIPS had a clinically meaningful reduction in average pain intensity from pre- to post-treatment. Participants rated the treatment as highly helpful and telehealth delivery as convenient; 98.5% reported that they would recommend the treatment to a friend with physical disability. In sum, this study demonstrated: (1) a decrease in pain intensity over the 12- month course of treatment; (2) that therapeutic alliance was not compromised by telehealth delivery; and (3) that participants with disability and pain found the treatment highly beneficial and convenient. Adherence was excellent with 90% completing all 8 sessions and 91% completing all assessments.

1.9 Supplements. Check all boxes that apply, to identify Supplements you should complete and upload to the **Supporting Documents** SmartForm in ***Zipline***.

This section is here instead of at the end of the form to reduce the risk of duplicating information in this IRB Protocol form that you will need to provide in these Supplements.

Check all That Apply	Type of Research	Supplement Name
☐	**Department of Defense** The research involves Department of Defense funding, facilities, data, or personnel.	*ZIPLINE* SUPPLEMENT: Department of Defense
☐	**Department of Energy** The research involves Department of Energy funding, facilities, data, or personnel.	*ZIPLINE* SUPPLEMENT: Department of Energy
☐	**Drug, biologic, botanical, supplement** Procedures involve the use of any drug, biologic, botanical or supplement, even if the item is not the focus of your research	*ZIPLINE* SUPPLEMENT: Drugs
☐	**Emergency exception to informed consent** Research that requires this special consent waiver for research involving more than minimal risk	*ZIPLINE* SUPPLEMENT: Exception from Informed Consent for Emergency Research (EFIC)
☐	**Genomic data sharing** Genomic data are being collected and will be deposited in an external database (such as the NIH dbGaP database) for sharing with other researchers, and you are asking the UW to provide the required certification or to ensure that the consent forms can be certified	*ZIPLINE* SUPPLEMENT: Genomic Data Sharing
☐	**Medical device** Procedures involve the use of any medical device, even if the device is not the focus of your research, except when the device is FDA-approved and is being used through a clinical facility in the manner for which it is approved	*ZIPLINE* SUPPLEMENT: Devices
☐	**Multi-site study** You are asking the UW IRB to review one or more sites in a multi-site study.	*ZIPLINE* SUPPLEMENT: Participating Site in Multi-Site Research

☐	**Participant results sharing** Individual research results will be shared with subjects.	*ZIPLINE* SUPPLEMENT: Participant Results Sharing
x	None of the above	

2 PARTICIPANTS

2.1 Participants. Describe the general characteristics of the subject populations or groups, including age range, gender, health status, and any other relevant characteristics.

Adults with physical disabilities from across the US.

2.2 Inclusion and exclusion criteria.

a. Inclusion criteria. Describe the specific criteria you will use to decide who will be included in your study from among interested or potential subjects. Define any technical terms in lay language.

(1) 18 years of age or older; (2) self-reported physical disability (including multiple sclerosis, spinal cord injury, traumatic brain injury, and/or amputation/limb loss) ; (3) chronic pain defined as daily pain of ≥ 3 months duration and ≥3 average pain intensity in the past week on a 0-10 numerical rating scale;[95] (4) experiences pain for more than 45 out of the past 90 days (defined as 50% of the time or greater); (5) reads, speaks and understands English; (6) has access and is able to communicate over the telephone and internet with or without assistive devices; and (7) is employed, working 15-20 hours per week or more, on average, or earning in excess of substantial gainful activity (approximately $1200/month).

We will enroll individuals with a range of physical disabilities, because there is no evidence that the type of disability affects responsiveness to the proposed treatment;[40] to maximize the generalizability of the results.

b. Exclusion criteria. Describe the specific criteria you will use to decide who will be excluded from your study from subjects who meet the inclusion criteria listed above. Define any technical terms in lay language.

(1) Under the age of 18; (2) cannot read, speak, or understand English; (3) no self-reported physical disability; (4) currently unemployed; (5) plans to retire or leave employment within the study period; (6) earning less than approximately $1200 per month and working fewer than 15-20 hours per week, on average; (7) cannot communicate or complete assessments over the phone or internet; (8) chronic pain defined as daily pain of ≤ 3 months duration and ≤ 3 average pain intensity in the past week on a 0-10 numerical rating scale; (9) experiences pain for fewer than 45 out of the past 90 days (defined as 50% of the time or less); (10) currently participating in another chronic pain study or cognitive behavioral therapy (CBT) study

We elected to minimize exclusion criteria to maximize generalizability to the population of employed individuals with chronic pain. Participants may continue pharmacological treatments and other treatments for pain.

2.3 Prisoners. IRB approval is required in order to include prisoners in research, even when prisoners are not an intended target population.

a. Will you recruit or obtain data from individuals that you know to be prisoners?

For records reviews: if the records do not indicate prisoner status and prisoners are not a target population, select "No". See the WORKSHEET: Prisoners for the definition of "prisoner".

[x] **No**
[ ] **Yes** → If yes, answer the following questions (i – iv).

i. Describe the type of prisoners, and which prisons/jails:

ii. One concern about prisoner research is whether the effect of participation on prisoners' general living conditions, medical care, quality of food, amenities, and opportunity for earnings in prison will be so great that it will make it difficult for prisoners to adequately consider the research risks. What will you do to reduce the chances of this?

iii. Describe what you will do to make sure that (a) your recruitment and subject selection procedures will be fair to all eligible prisoners and (b) prison authorities or other prisoners will not be able to arbitrarily prevent or require particular prisoners from participating.

iv. If your research will involve prisoners in federal facilities or in state/local facilities outside of Washington State: check the box below to provide your assurance that you will (a) not encourage or facilitate the use of a prisoner's participation in the research to influence parole decisions, and (b) clearly inform each prisoner in advance (for example, in a consent form) that participation in the research will have no effect on his or her parole.

[ ] **Confirmed**

b. Is your research likely to have subjects who become prisoners while participating in your study?

For example, a longitudinal study of youth with drug problems is likely to have subjects who will be prisoners at some point during the study.

[x] **No**
[ ] **Yes** → If yes, if a subject becomes a prisoner while participating in your study, will you continue the study procedures and/or data collection while the subject is a prisoner?

[ ] **No**
[ ] **Yes** → If yes, describe the procedures and/or data collection you will continue with prisoner subjects

2.4 Protected populations. IRB approval is required for the use of the subject populations listed here. Check the boxes for any of these populations that you will purposefully include in your research. (In other words, being a part of the population is an inclusion criterion for your study.)

The WORKSHEETS describe the criteria for approval but do not need to be completed and should not be submitted.

Population	Worksheet
☐ Fetuses in utero	WORKSHEET: Pregnant Women
☐ Neonates of uncertain viability	WORKSHEET: Neonates
☐ Non-viable neonates	WORKSHEET: Neonates
☐ Pregnant women	WORKSHEET: Pregnant Women

a. If you check any of the boxes above, use this space to provide any information you think may be relevant for the IRB to consider.

2.5 Native Americans or non U.S. indigenous populations. Will you actively recruit from Native American or non-U.S. indigenous populations through a tribe, tribe-focused organization, or similar community-based organization?

Indigenous people are defined in international or national legislation as having a set of specific rights based on their historical ties to a particular territory and their cultural or historical distinctiveness from other populations that are often politically dominant.

Examples: a reservation school or health clinic; recruiting during a tribal community gathering

☒ **No**
☐ **Yes** → If yes, name the tribe, tribal-focused organization, or similar community based organization. The UW IRB expects that you will obtain tribal/indigenous approval before beginning your research.

2.6 Third party subjects. Will you collect private identifiable information about *other individuals* from your subjects? Common examples include: collecting medical history information or contact information about family members, friends, co-workers.

"Identifiable" means any direct or indirect identifier that, alone or in combination, would allow you or another member of your research team to readily identify the person. For example, suppose that you are studying immigration history. If you ask your subjects several questions about their grandparents but you do not obtain names or other information that would allow you to readily identify the grandparents, then you are not collecting private identifiable information about the grandparents.

☐ **No**
☒ **Yes** → If yes, these individuals are considered human subjects in your study. Describe them and what data you will collect about them.

We will collect collateral contact data from participants. We typically do this in case of needing other people to contact to get ahold of the subject during time of research.

2.7 Number of subjects. Can you predict or describe the maximum number of subjects (or subject units) you need to complete your study, for each subject group?

Subject units mean units within a group. For most research studies, a group will consist of individuals. However, the unit of interest in some research is not the individual. Examples:

- *Dyads such as caregiver-and-Alzheimer's patient, or parent and child*
- *Families*
- *Other units, such as student-parent-teacher*

Subject group means categories of subjects that are meaningful for your research. Some research has only one subject group – for example, all UW students taking Introductory Psychology. Some common ways in which subjects are grouped include:

- *By intervention – for example, an intervention group and a control group.*
- *By subject population or setting – for example, urban versus rural families*
- *By age – for example, children who are 6, 10, or 14 years old.*

The IRB reviews the number of subjects you plan to study in the context of risks and benefits. You may submit a Modification to increase this number at any time after you receive IRB approval. If the IRB determines that your research involves no more than minimal risk: you may exceed the approved number and it will not be considered non-compliance. If your research involves more than minimal risk: exceeding the approved number will be considered non-compliance.

☐ **No** → If no, provide your rationale in the box below. Also, provide any information you can about the scope/size of the research. You do not need to complete the table.

Example: you may not be able to predict the number of subjects who will complete an online survey advertised through Craigslist, but you can state that you will post your survey for two weeks and the number who respond is the number who will be in your study.

☒ **Yes** → If yes, for each subject group, use the table below to provide your estimate of the maximum desired number of individuals (or other subject unit, such as families) who will complete the research.

Group name/description	Maximum desired number of individuals (or other subject unit, such as families) who will complete the research ***For clinical trials: provide numbers for your site and for the study-wide total number***
People with physical disabilities	200

3 NON-UW RESEARCH SETTING

Complete this section only if your research will take place outside of UW and Harborview

3.1 Reason for sites. Describe the reason(s) why you selected the sites where you will conduct the research.

The research will be conducted at the University of Washington because the UW Primary Investigator has been a professor here at the UW Rehabilitation Medicine Department for many years and has her own experienced team of research staff. Furthermore, Dr. Ehde is the creator of the TIPS intervention.

3.2 Local context. Culturally-appropriate procedures and an understanding of local context are an important part of protecting subjects. Describe any site-specific cultural issues, customs, beliefs, or values that may affect your research or how it is conducted.

Examples: It would be culturally inappropriate in some international settings for a woman to be directly contacted by a male researcher; instead, the researcher may need to ask a male family member for permission before the woman can be approached. It may be appropriate to obtain permission from community leaders prior to obtaining consent from individual members of a group.

This federal site maintains an international list of human research standards and requirements:
http://www.hhs.gov/ohrp/international/index.html

n/a

3.3 Site-specific laws. Describe any local laws that may affect your research (especially the research design and consent procedures). The most common examples are laws about:

- **Specimens** – for example, some countries will not allow biospecimens to be taken out of the country.
- **Age of consent** – laws about when an individual is considered old enough to be able to provide consent vary across states, and across countries.
- **Legally authorized representative** – laws about who can serve as a legally authorized representative (and who has priority when more than one person is available) vary across states and countries.
- **Use of healthcare records** – many states (including Washington State) have laws that are similar to the federal HIPAA law but that have additional requirements.

n/a

3.4 Site-specific administrative or ethical requirements. Describe local administrative or ethical requirements that affect your research.

Example: A school district may require you to obtain permission from the head district office as well as school principals before approaching teachers or students; a factory in China may allow you to interview factory workers but not allow you to pay them.

n/a

3.5 Students: Does your research involve traveling outside of the US?

[x] **No**

☐ **Yes** → If yes, confirm by checking the box that (1) you will register with the **UW Office of Global Affairs** before traveling; (2) you will notify your advisor when the registration is complete; and (3) you will request a UW Travel Waiver if your research involves travel to the list of countries requiring a UW Travel Waiver.

☐ **Confirmed**

4 RECRUITING and SCREENING PARTICIPANTS

4.1 Recruiting and Screening. Describe how you will identify, recruit, and screen subjects. Include information about: how, when, where, and in what setting. Identify who (by position or role, not name) will approach and recruit subjects, and who will screen them for eligibility.

We will recruit from the UW Rehabilitation Research Registry of 8,000+ adults with physical disabilities from across the US, which includes adults with a range of physical disabilities, including LL/amputation, MS, SCI, and TBI. About 30% of persons in the UW Registry are employed, and >50% report chronic pain. Research study coordinators will prescreen the medical records of patients in this registry to ensure they meet basic eligibility criteria including age, disability diagnosis, and employment status.

We will recruit participants from the waitlist for the ADAPT study (STUDY00004422). The ADAPT study currently has a waitlist of 300+ potential participants who have indicated interest in pain research and the ADAPT study (in addition to future interested participants), but is only able to enroll approximately 140 additional study participants. Research study coordinators will prescreen the medical records of patients on this list to ensure they meet basic eligibility criteria including age, disability diagnosis, and employment status.

We will recruit participants with multiple sclerosis from clinic referrals from the UW MS Center and from the UW MS Center's Research Pool (STUDY00005250) of approximately 400 adults with multiple sclerosis who have previously indicated interest in research. Research study coordinators will prescreen the medical records of patients in this pool to ensure they meet basic eligibility criteria including age, disability diagnosis, and employment status.

We will recruit participants with multiple sclerosis, traumatic brain injury, spinal cord injury, and/or amputation/limb loss from social media websites including but not limited to Facebook, LinkedIn, Discord, Reddit, and Twitter. Social media posts on these pages may be posted on UW and SRALab-associated pages or on the pages "liked" by members of our target audience, such as the MS Society's Facebook page. The study may also be posted on relevant Facebook groups. The social media posts may include a graphic similar to the uploaded clinic flyer (modified to fit on the specific site), a description of the study similar to the uploaded web description, and a self-administered pre-screening survey (see Section 4.2) that will collect basic demographic and contact information from interested participants.

We may recruit participants who are found ineligible for the TELEPOP Study at UW (STUDY00004135). The TELEPOP study recruits from the following sources: the Northwest Regional Spinal Cord Injury System (NWRSCIS) email list, Researchmatch.org, Facebook, SCI websites, and the NWRSCIS Model System database. The TELEPOP study also recruits participants who previously

participated in the SCI-CARE Study at UW (STUDY 43302) and consented to be contacted for future research. The primary recruitment source for the SCI-Care study was through pre-screening the clinical schedules for the UW and HMC rehabilitation clinics. We will receive names, contact information, and reasons for ineligibility from the TELEPOP Study lists. We may also recruit participants from the TBI Care Study at the University of Washington. We will receive names and contact information from lists generated by research staff involved with the TBI Care Study. Participants in the TBI Care study are asked on the consent form if they are willing to be contacted by other studies, and we will only be contacting those who respond, "yes." The TBI Care Study will also receive IRB approval to share their participant list with the E-TIPS Study team.

The UW Medicine Rehabilitation Medicine clinics, the UW Rehabilitation Medicine Participant Pool, and NIDILRR TBI Model System and Healthy Aging RRTC are also potential recruitment sources. Participants may receive information about the study by mail or email from staff at these clinics, and study flyers will be posted in various areas around UW, SRALab, and other rehab hospitals. We will also recruit from SRALab's VR and Day Rehabilitation programs which include individuals with a range of physical disabilities. We will advertise the study on ClinicalTrials.gov, the University of Washington Institute of Translational Health Services (ITHS) site, the UW MS Center site, in InMotion Magazine, and on consumer organization websites such as the National MS Society, ResearchMatch, the Amputee Coalition, ADA.gov, the South Carolina Spinal Cord Injury Association, other support and advocacy groups for people with disabilities, as well as any corresponding social media channels. We will also advertise the study as a potential opportunity for volunteers on Craigslist. Previous participants may share information about the study (such as study description, link to pre-screening survey, graphics and flyers) with others in their community.

We will also use LEAF, a tool from the ITHS to identify potential participants. LEAF allows researchers and investigators to query the electronic health records of UW Medicine patients using search terms that are relevant to the research. For example, we may search for participants by age, employment status, and diagnosis. If a participant appears to be eligible based on our query in LEAF, we will then look up their MRN in EPIC and obtain their contact information for the purpose of recruitment.

Recruitment and Enrollment. We will use procedures from past RCTs in which we have met our enrollment goals and retained >90% of our participants.[83,85,94,96] Interested individuals will complete a telephone screening, during which they will learn about the study and have their eligibility confirmed by research staff. Research staff may email appointment confirmations and reminders to potential participants prior to screening.

If potential participants are found to be ineligible during the telephone screening, we will offer to email a list of other studies they might be eligible for and interested in. Participants who were found to be ineligible at the initial screening may be contacted in the future to be re-screened. We will note whether or not a participant has been screened before in REDCap, and, if found eligible, they will follow the consent process before participating in the study. If found to be ineligible after enrollment (e.g., following completion of the baseline assessment), participants may be withdrawn.

4.2 Recruitment materials.

a. What materials (if any) will you use to recruit and screen subjects?

Examples: talking points for phone or in-person conversations; video or audio presentations; websites; social media messages; written materials such as letters, flyers for posting, brochures, or printed advertisements; questionnaires filled out by potential subjects.

We will use social media posts, advertisements or announcements on relevant websites, written materials (such as flyers and brochures), emails, and letters. Social media posts may include a self-administered pre-screening survey that will be used to collect demographic information such as age, employment status, disability diagnoses, average pain rating in the past week, name, email address, and phone number from interested participants. Participants who learn about the study via social media and click the pre-screening survey link in social media posts will be directed to complete the pre-screening survey in REDCap, WebQ, or Google Forms. Participants who complete the pre-screening survey but do not meet the study criteria for pain, employment status, and disability diagnosis will receive an email informing them they are not eligible for the E-TIPS Study at this time, along with links to other resources for potential research participation. Participants who do appear to be eligible based on their responses to the pre-screening survey will be contacted by study staff and go through the usual screening and consent process.

We have a recruitment script and screening form that research staff will use to conduct the screening. We request approval to make minor changes to recruitment materials (e.g. minor word changes, formatting and contact information) without submitting a modification. Any changes to 'cold recruitment' materials mailed to UW Medicine patients will be submitted for IRB approval.

b. Upload descriptions of each type of material (or the materials themselves) to the **Consent Forms and Recruitment Materials** SmartForm of ***Zipline***. If you will send letters to the subjects, the letter should include a statement about how you obtained the subject's name, contact information, and any other subject-specific information (such as a health condition) that is mentioned in the letter.

HSD encourages researchers to consider uploading descriptions of most recruitment and screening materials instead of the materials themselves. The goal is to provide the researchers with the flexibility to change some information on the materials without submitting a Modification for IRB approval of the changes. Examples:

- *You could provide a list of talking points that will be used for phone or in-person conversations instead of a script.*
- *For the description of a flyer, you might include the information that it will provide the study phone number and the name of a study contact person (without providing the actual phone number or name). In doing so, you would not need to submit a Modification if/when the study phone number or contact person changes. Also, instead of listing the inclusion/exclusion criteria, you might state that the flyer will list one or a few of the major inclusion/exclusion criteria.*
- *For the description of a video or a website, you might include a description of the possible visual elements and a list of the content (e.g., study phone number; study contact person; top three inclusion/exclusion criteria; payment of $50; study name; UW researcher).*

4.3 Relationship with participant population. Do any members of the study team have an existing relationship with the study population(s)?

Examples: a study team member may have a dual role with the study population (for example, being their clinical care provider, teacher, laboratory directory or tribal leader in addition to recruiting them for his/her research).

[x] **No**
[ ] **Yes** → If yes, describe the nature of the relationship.

4.4 Payment to participants. Describe any payment you will provide, including:

- The total amount/value
- Whether payment will be "pro-rated" so that participants who are unable to complete the research may still receive some part of the payment

The IRB expects the consent process or study information provided to the subjects to include information about the number and amount of payments, and especially the time when subjects can expect to receive payment. One of the most frequent complaints received by HSD is from subjects who expected to receive cash or a check on the day that they completed a study and who were angry or disappointed when payment took 6-8 weeks to reach them.

Do not include a description of any expenses that will be reimbursed.

Payment of $25 per assessment with a bonus of $25 for completion of all assessments (up to $125 total). Payment of $25 for those participants randomly selected for additional post treatment conversation.

4.5 Non-monetary compensation. Describe any non-monetary compensation you will provide. Example: extra credit for students; a toy for a child. If you will be offering class credit to students, you must provide (and describe) an alternate way for the students to earn the extra credit without participating in your research.

n/a

4.6 Will you access or obtain data or specimens for recruiting and screening procedures prior to enrollment?

Examples: names and contact information; the information gathered from records that were screened; results of screening questionnaires or screening blood tests; Protected Health Information (PHI) from screening medical records to identify possible subjects.

[ ] **No** → If no, skip the rest of this section; go to question **5.1**.
[x] **Yes** → If yes, describe any data and/or specimens (including PHI) you will access or obtain for recruiting and screening and whether you will retain it as part of the study data.

Research staff may review medical records for pre-screening purposes without consent from patients. Specifically, research staff may access the medical records of UW Medicine patients to identify individuals with a physical disability such as MS, SCI, TBI, or amputation who may be appropriate for the study. We will access names and contact information of those who may be eligible. If available, we will also look in patients' medical records for employment status and disability diagnosis.

The pre-screening survey that interested participants may access through social media posts will collect demographic information such as age, employment status, disability diagnosis, and average

pain rating, as well as contact information such as full name, phone number, and email address. These data will be used for the purpose of recruitment and screening only.

In addition, research staff will ask interested patients a set of formalized questions to determine eligibility based on the inclusion/exclusion criteria, including disability diagnosis, employment information, previous participation in pain and treatment studies, and pain characteristics. The staff will obtain non-written consent to ask the eligibility questions before initiating the screening process.

We will retain responses to screening questions and, for those who decline or are ineligible, reasons for their ineligibility or for declination.

If subjects are eligible but decline to participate, we will ask them some demographics questions. We request approval to make minor changes to screening materials (e.g. minor word changes, formatting, order of questions) without submitting a modification.

4.7 Consent for recruiting and screening. Will you obtain consent for any of the recruiting and screening procedures? (Section 8: Consent of Adults asks about consent for the main study procedures).

"Consent" includes: consent from individuals for their own participation; parental permission; assent from children; consent from a legally authorized representative for adult individuals who are unable to provide consent.

Examples:

- *For a study in which names and contact information will be obtained from a registry: the registry should have consent from the registry participants to release their names and contact information to researchers.*
- *For a study in which possible subjects are identified by screening records: there will be no consent process.*
- *For a study in which individuals respond to an announcement and call into a study phone line: the study team person talking to the individual may obtain non-written consent to ask eligibility questions over the phone.*

☐ **No** → If no, skip the rest of this section; go to question **5.1**.
☒ **Yes** → If yes, describe the consent process.

We will obtain verbal consent to ask questions to determine eligibility or to ask additional demographics questions if subjects decline participation. We are requesting a waiver of consent and documentation of consent for the self-administered pre-screening survey for potential participants who respond via social media.

a. Documentation of consent. Will you obtain a written or verifiable electronic signature from the subject on a consent form to document consent for all of the **recruiting and screening procedures**?

☒ **No** → If no, describe the information you will provide during the consent process and for which procedures.

See recruitment script.

☐ **Yes** → If yes, upload the consent form to the **Consent Forms and Recruitment Materials** page of ***Zipline***.

5 PROCEDURES

5.1 **Study procedures**. Using lay language, provide a complete description of the study procedures, including the sequence, intervention or manipulation (if any), drug dosing information (if any), use of records, time required, and setting/location. If it is available and you think it would be helpful to the IRB: Upload a study flow sheet or table to the **Supporting Documents** SmartForm in ***Zipline***.

*For studies comparing standards of care: It is important to accurately identify the research procedures. See UW IRB **POLICY: Risks of Harm from Standard Care** and the draft guidance from the federal Office of Human Research Protections, **"Guidance on Disclosing Reasonably Foreseeable Risks in Research Evaluating Standards of Care";** October 20, 2014.*

Subjects will be screened over the phone and, if found eligible, will arrange a date/time with the study coordinator for an additional phone call to review the consent form and engage in the consent process. After consenting to participate in the study, subjects will be asked by the coordinator over the phone any medication information, and will then be sent a link to complete a baseline survey online. The baseline survey will include demographic questions and questions about the participant's diagnosis, employment, and pain history.

Following completion of the survey, subjects will be randomized to either usual care or the treatment group (E-TIPS). Study staff will inform subjects of their assignment and, for those assigned to the E-TIPS treatment, arrange a time for their first treatment session. Participants in both groups will complete REDCap assessments at baseline (within one month prior to randomization), six weeks after randomization, ten weeks after randomization, and six months from randomization. The E-TIPS group will also attend eight 45-60-minute teleconference sessions with therapists over the first 8-10 weeks of treatment and complete home activities between each session using the E-TIPS Participant Manual. Each REDCap assessment will take around 20-30 minutes to complete and each therapy session will last around 45 min-60 min. Therapists will also conduct one 10-15-minute "booster session" with participants approximately two weeks after the final treatment session. Therapy will be administered via telephone, therefore subjects will need to have access to a telephone as well as the Internet to complete surveys. Since the private telephone sessions may be recorded, therapists will make an announcement at the beginning of each session letting participants know that their communication will be recorded for purposes of treatment fidelity monitoring. The sessions will teach subjects a variety of cognitive behavioral skills for managing pain that have been used in our past research studies using the TIPS intervention. These including teaching them basic relaxation skills, strategies for pacing activities, managing pain flare ups, and learning how to change their thoughts to better manage their pain and become aware of how their thoughts can influence their emotions and physical state. They will also discuss in the sessions how to integrate these pain management skills into their daily lives, including at work as needed. The home activities will include relaxation exercises as well as "thought record forms (i.e., worksheets)," which are used in most CBT treatments. Participants may discuss the thought records and other home practice activities they complete using the Participant Manual with therapists, and therapists may use this discussion of home practice activities to gauge participant engagement. We request approval to make minor changes to the Participant Manual (e.g. minor word changes and formatting adjustments) without submitting a modification.

After the 6-month assessment, the usual care group will be offered treatment. While in usual care, participants are free to continue or start any treatment they decide. It is not necessary that they refrain from seeking out mental health or other services.

We will randomly select up to 20 participants proportionally to the diagnostic group domain included in the broader sample and interview them about their experience with E-TIPS treatment. As this is qualitative research, the final sample size will be determined by the point we reach thematic saturation, meaning the point when we are no longer learning new information about the topic/question at hand. We will interview participants by audio-only Zoom using an interview guide. Audio-only Zoom has been selected for ease of recording and

obtaining transcripts for analyses. We will ask participants what they found helpful and not helpful about their treatment and about the barriers and facilitators to the treatment. We will then perform a content analysis.

5.2 MRI scans. Will any subjects have a Magnetic Resonance Imaging (MRI) scan as part of the study procedures?

This means scans that are performed solely for research purposes or clinical scans that are modified for research purposes (for example, using a gadolinium-based contrast agent when it is not required for clinical reasons).

[x] **No** → If no, go to question **5.3**.
[ ] **Yes** → If yes, answer questions **a** through **c**.

a. Describe the MRI scan(s). Specifically:

- What is the purpose of the scan(s)? *Examples: obtain research data; safety assessment associated with a research procedure.*
- Which subjects will receive a MRI scan?
- Describe the minimum and maximum number of scans per subject, and over what time period the scans will occur. *For example: all subjects will undergo two MRI scans, six months apart.*

b. Use of gadolinium. Will any of the MRI scans involve the use of a gadolinium-based contrast agent (GBCA?)

[ ] **No**
[ ] **Yes** → If yes, which agents will be used? *Check all that apply.*

	Brand Name	Generic Name	Chemical Structure
[ ]	Dotarem	Gadoterate meglumine	Macrocylic
[ ]	Eovist / Primovist	Gadoxetate disodium	Linear
[ ]	Gadavist	Gadobutro	Macrocyclic
[ ]	Magnevist	Gadpentetate dimeglumine	Linear
[ ]	MultiHance	Gadobenate dimeglumine	Linear
[ ]	Omniscan	Gadodiamide	Linear
[ ]	OptiMARK	Gadoversetamide	Linear
[ ]	ProHance	Gadoteridol	Macrocyclic
[ ]	Other, provide name:		

1.) The FDA has concluded that gadolinium is retained in the body and brain for a significantly longer time than previously recognized, especially for linear GBCAs. The health-related risks of this longer retention are not yet clearly established. However, the UW IRB expects researchers to provide a compelling justification for using a linear GBCA instead of a macrocyclic GBCA, to manage the risks associated with GBCAs.

Describe why it is important to use a GBCA with your MRI scan(s). Describe the dose you will use and (if it is more than the standard clinical dose recommended by the manufacturer) why it is necessary to use a higher dose. If you plan to use a linear GBCA, explain why you cannot use a macrocyclic GBCA.

2.) Information for subjects. Confirm by checking this box that you will either provide subjects with the FDA-approved Patient Medication Guide for this GBCA you are using or that the same information will be inserted into the consent form.

☐ **Confirmed**

c. MRI facility. At which facility(ies) will the MRI scans occur? Check all that apply.

- ☐ UWMC Radiology/Imaging Services (the UWMC clinical facility)
- ☐ DISC Diagnostic Imaging Sciences Center (UWMC research facility)
- ☐ BMIC Biomolecular Imaging Center (South Lake Union research facility)
- ☐ Harborview Radiology/Imaging Services (the Harborview clinical facility)
- ☐ SCCA Imaging Services
- ☐ Northwest Diagnostic Imaging
- ☐ Other: identify in the text box below:

Personnel. For MRI scans that will be conducted at the DISC or BMIC research facilities: The role, qualifications, and training of individuals who will operate the scanner, administer the GBCA (if applicable), and/or insert and remove the IV catheter should be listed on the Study Team addendum.

5.3 Data variables. Describe the specific data you will obtain (including a description of the most sensitive items). If you would prefer, you may upload a list of the data variables to the **Supporting Documents** SmartForm instead of describing the variables below.

Baseline Data and Demographic Information
After obtaining informed consent, research staff will ask the participant to provide demographic data (e.g., date of diagnosis, cause of injury, age, zip code, biological sex at birth, gender identity, ethnicity, Race, marital status and years of education) for descriptive purposes. We will also ask participants about pain type, quality, and location as well as activity levels and current pain medications and treatments.

Personal Contact Information
Research staff will collect the following information from participants: (1) contact information; (2) preferred telephone number to reach an individual if they have more than one line; (3) permission to leave message on

mobile/landline phones; (4) permission to send a text message reminder for treatment sessions and, if yes, cell phone carrier; (5) time zone and best times/days to reach participant; (6) email address; (7) home address; (8) zip code, (9) preferred communication method; (10) names and contact information of people staff are allowed to contact if participant is lost to follow-up or otherwise cannot be contacted (i.e., collateral contacts).

Assessments
Participants will be asked questions about pain interference, pain intensity, pain self-efficacy, fatigue severity, depressive symptoms, sleep disturbance, vocational outcomes, social roles and activities, pain anxiety, the impact of COVID-19, and more. Therapists will make note of treatment attendance via REDCap and ask participants about treatment satisfaction and adherence to home practice. Therapists will also note duration of session, where participant was located during session, and whether or not the call took place during working hours.

Post-treatment qualitative interviews
We will ask participants about their overall experience with E-TIPS treatment intervention, experience during the active phase of treatment, skill development and maintenance since ending E-TIPS, and access to pain self-management treatment.

5.4 Data sources. For all types of data that you will access or collect for this research: Identify whether you are obtaining the data from the subjects (or subjects' specimens) or whether you are obtaining the data from some other source (and identify the source).

If you have already provided this information in Question 5.1, you do not need to repeat the information here.

We will be obtaining data from participants via telephone and online surveys administered through REDCap. We will prescreen the medical records of some participants in EPIC to obtain confirmation of disability diagnosis and, if eligible, employment information.

5.5 Retrospective/prospective. For all types of data and specimens that you will access or collect for this research: do all data and specimens to be used in the research exist (for example, in subjects' medical records) at the time this application is being submitted for initial review?

- [x] **No**
- [ ] **Yes**

Include any necessary comments or explanation below (Note that for most studies this can be left blank):

5.6 Identifiability of data and specimens. Answer these questions carefully and completely. This will allow HSD to accurately determine the type of review that is required and to assist you in identifying relevant compliance requirements. Review the following definitions before answering the questions:

__Access__ means to view or perceive data, but not to possess or record it. See, in contrast, the definition of "obtain".
__Identifiable__ means that the identity of an individual is or may be readily (1) ascertained by the researcher or any other member of the study team from specific data variables or from a combination of data variables, or (2) associated with the information.
__Direct identifiers__ are direct links between a subject and data/specimens. Examples include (but are not limited to): name, date of birth, medical record number, email or IP address, pathology or surgery accession number, student number, or a collection of your data that is (when taken together) identifiable.
__Indirect identifiers__ are information that links between direct identifiers and data/specimens. Examples: a subject code or pseudonym.
__Key__ refers to a single place where direct identifiers and indirect identifiers are linked together so that, for example, coded data can be identified as relating to a specific person. Example: a master list that contains the data code and the identifiers linked to the codes.
__Obtain__ means to possess or record in any fashion (writing, electronic document, video, email, voice recording, etc.) for research purposes and to retain for any length of time. This is different from __accessing__, which means to view or perceive data.

a. Will you or any members of your team have <u>access</u> to any direct or indirect identifiers?

[x] **Yes** → If yes, describe which identifiers and for which data/specimens.

Study coordinators and assistants will be able to access identifiable information in the REDCap databases and the WebQ database (the main study database as well as the database used to collect information from the self-administered pre-screening survey) in order to contact participants and collect assessments. Study coordinators will also have access to names, contact information, and medical record numbers from recruitment sources such as Participant Pools, clinic referrals, coding lists, and other studies. Clinicians will have access to names and contact info plus other identifying information in order to conduct the treatment sessions.

[ ] **No** → If no, select the reason(s) why you (and all members of your team) will not have access to direct or indirect identifiers.

- [ ] There will be no identifiers.
- [ ] Identifiers or the key have been (or will have been) destroyed before you have access.
- [ ] You have (or will have) entered into an agreement with the holder of the identifiers (or key) that prohibits the release of the identifiers (or key) to you under any circumstances.

  You should be able to produce this agreement for IRB upon request. Examples: a Data Use Agreement, Repository Gatekeeping form, or documented email.
- [ ] There are written policies and procedures for the repository/database/data management center that prohibit the release of the identifiers (or identifying link). This includes situations involving an Honest Broker.
- [ ] There are other legal requirements prohibiting the release of the identifiers or key to you. Describe them below.

b. Will you obtain any direct or indirect identifiers?

[x] **Yes** → If yes, describe which identifiers and for which data/specimens.

Research staff members will obtain first and last names, addresses, telephone numbers, and/or email addresses. For everyone we contact for recruitment purposes, we will also collect, at minimum, first and last name and a telephone number; if available, we will also collect mailing or email addresses as well as job title and job description. The one exception is if a prospective participant contacts researchers first and only provides limited information (e.g., a participant sees a flyer in a clinic and leaves a voicemail with only her first name and telephone number).

[ ] **No** → If no, select the reason(s) why you (and all members of your team) will not obtain direct or indirect identifiers.

[ ] There will be no identifiers.

[ ] Identifiers or the key have been (or will have been) destroyed before you have access.

[ ] You have (or will have) entered into an agreement with the holder of the identifiers (or key) that prohibits the release of the identifiers (or key) to you under any circumstances.

You should be able to produce this agreement for IRB upon request. Examples: a Data Use Agreement, Repository Gatekeeping form, or documented email.

[ ] There are written policies and procedures for the repository/database/data management center that prohibit the release of the identifiers (or identifying link). This includes situations involving an Honest Broker.

[ ] There are other legal requirements prohibiting the release of the identifiers or key to you. Describe them below.

c. If you obtain any identifiers, indicate how the identifiers will be stored (and for which data). NOTE: Do not describe your data security plan here – we will ask for that information in section 9.6.

[x] You will store the identifiers with the data. Describe the data to which this applies:

Identifiers (first and last name, email, phone number) will be linked to responses to the pre-screening survey and stored in WebQ.

[x] You will store identifiers and study data separately but you will maintain a link between the identifiers and the study data (for example, through the use of a code). Describe the data to which this applies:

Participant identifiers will be kept in a password-protected database on the department's secure server and in the password-protected E-TIPS REDCap databases. The link between the study data and a participant's identity in the form of the unique study code will only exist in the password-protected database on the department's secure server (which only research staff members will know the password for) and in the password-protected REDCap databases.

[ ]

You will store identifiers separately from the study data, with no link between the identifiers and the study data. Describe the data to which this applies:

d. Research collaboration. Will individuals who provide you with coded information or specimens for your research also collaborate on other activities for this research? If yes, identify the activities and provide the name of the collaborator's institution/organization.

Examples include but are not limited to: (1) study, interpretation, or analysis of the data that results from the coded information or specimens; and (2) authorship on presentations or manuscripts related to this work.

5.7 Newborn dried blood spots. Will you use newborn dried bloodspots collected in the United States on or after March 18, 2015 **AND** will you obtain the bloodspots before January 21, 2019?

[x] **No**
[ ] **Yes** → If yes, is this research supported by any federal funding (including any fellowship or career development award that provides salary support)?

[ ] **No**
[ ] **Yes** → If yes, describe how you will ensure that the bloodspots were collected with parental permission (in compliance with a 2015 law that applies to federal-funded research).

5.8 Protected Health Information (PHI). Will you access, obtain, use, or disclose a participant's identifiable PHI for any reason (for example, to identify or screen potential subjects, to obtain study data or specimens, for study follow-up) that does not involve the creation or obtaining of a Limited Data Set?

PHI is individually-identifiable healthcare record information or clinical specimens from an organization considered a "covered entity" by federal HIPAA regulations, in any form or media, whether electronic, paper, or oral. ***If you will use UW Medical Records, you must answer yes to this question.***

[ ] **No** → If no, skip the rest of this question; go to question **5.9**
[x] **Yes** → If yes, answer all of the questions below.

a. Describe the PHI you will access or obtain, and the reason for obtaining it. *Be specific.*

We will access patient names, contact information (telephone number and email address), mailing address, employment status (if available), medical record numbers, and disability diagnosis for recruitment purposes.

b. Is any of the PHI located in Washington State?

[ ] **No**
[x] **Yes**

c. Describe how you will access or obtain the PHI. *Be specific.*

PHI will be sent to us via referrals from physicians at the UW Medical Center or Harborview Medical Center or coding lists from UW Medicine. We will also access PHI for purposes of recruitment using the waitlist for the ADAPT study (STUDY00004422) and the UW MS Center's Research Pool (STUDY00005250) as well as the Rehab Medicine Department Participant Pool, the

TELEPOP Study, or LEAF, a tool from the ITHS. We may access PHI by looking up the medical record numbers of potential participants in EPIC.

d. For which PHI will you obtain HIPAA authorization from the subjects by having them sign a HIPAA Authorization form, before obtaining and using the PHI?

None

Confirm by checking the box that you will use the UW Medicine HIPAA Authorization form maintained on the HSD website if you will access, obtain, use, or disclose UW Medicine PHI.

☐ **Confirmed**

e. For which PHI will you NOT obtain HIPAA authorization from the subjects?

PHI obtained for recruitment, including PHI received through physician referrals, coding lists, the ADAPT Study waitlist, and the UW MS Center Participant Pool. We will pre-screen medical records to assess criteria for eligibility and disclose our record review according to UW Medicine compliance.

Provide the following assurances by checking the boxes.

☒ The PHI will not be reused or disclosed to any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of PHI would be permitted.

☒ You will fulfill the HIPAA "accounting for disclosures" requirement. See UW Medicine Compliance Policy #104. THIS IS ONLY FOR UW RECORDS.

☒ There will be reasonable safeguards to protect against identifying, directly or indirectly, any patient in any report of the research.

5.9 Genomic data sharing. Will you obtain or generate genomic data (as defined at http://osp.od.nih.gov/scientific-sharing/genomic-data-sharing-faqs/)?

☒ **No**
☐ **Yes** → If yes, answer the question below.

a. Do you plan to send genomic data from this research to a national database (for example, NIH's dbGaP database)?

☐ **No**
☐ **Yes** → If yes, complete the ***ZIPLINE* SUPPLEMENT Genomic Data Sharing** and upload it to the **Supporting Documents** SmartForm of ***Zipline***.

5.10 Whole genome sequencing. For research involving biospecimens: Will the research include whole genome sequencing?

Whole genome sequencing is sequencing of a human germline or somatic specimen with the intent to generate the genome or exome sequence of that specimen.

☒ **No**
☐ **Yes**

5.11 Data and specimen sharing/banking. Are you likely to share some or all of the data, specimens, or subject contact information with other researchers or a repository/database for research purposes not related to this study, or to bank them for your own future unspecified research uses? **You are strongly encouraged to consider the broadest possible future plans you might have, and whether you will obtain consent now from the subjects for future sharing or unspecified uses.** Answer **YES** even if you will only share information without identifiers. Answer **NO** if you are unlikely to do any sharing, or if your only sharing will be through the NIH Genomic Data Sharing described in question 5.9.

Many federal grants and contracts now require data or specimen sharing as a condition of funding, and many journals require data sharing as a condition of publication. "Sharing" may include: informal arrangements to share your banked data/specimens with other investigators; establishing a repository from which you formally share with others through written agreements; or sending your data/specimens to a third party repository/archive/entity such as the Social Science Open Access Repository (SSOAR), or the UCLA Ethnomusicology Archive.

[ ] **No**

[x] **Yes** → If yes, answer all of the questions below.

a. Describe <u>what will be stored</u>, including whether any direct or indirect (e.g., subject codes) identifiers will be stored.

All study data will be stored in de-identified form indefinitely following the closure of the IRB application. Study researchers may conduct secondary analyses of the study data in de-identified form following closure related to examining various aspects of the behavioral interventions, quality of life issues regarding individuals with disabilities

In addition, direct identifiers including first and last names, phone numbers, mailing addresses, and email addresses will be stored indefinitely.

b. Describe <u>what will be shared</u>, including whether direct identifiers will be shared and (for specimens) what data will be released with the specimens.

Study data: Study data may be shared in de-identified form with outside researchers and collaborators as requested and deemed acceptable by study investigators.

In addition, direct identifiers may be shared with other study researchers within the UW Department of Rehabilitation Medicine if a participant indicates they would like to be enrolled in the department participant pool and contacted regarding future opportunities to participate in research.

Private identifiable data will not be shared with outside study researchers. The one exception would be oversight entities involved with the protection of human subjects and oversight of the research.

c. Who will oversee and/or manage the sharing?

The UW Principal investigator, Dawn Ehde

d. Describe <u>the possible future uses</u>, including limitations or restrictions (if any) on future uses or users. As stated above, consider the broadest possible uses.

Examples: data will be used only for cardiovascular research; data will not be used for research on population origins.

As mentioned above, study data may be analyzed to answer a priori hypotheses related to various aspects of the study behavioral interventions and quality of life issues regarding individuals with disabilities within the context of rehabilitation medicine.

e. Consent. Will you obtain consent now from subjects for the banking and/or future sharing?

	No
x	**Yes** → If yes, be sure to include the information about this consent process in the consent form (if there is one) and in your answers to the consent questions in Section 8.

f. Withdrawal. Will subjects be able to withdraw their data/specimens from banking or sharing?

	No
x	**Yes** → If yes, describe how, and whether there are any limitations on withdrawal.

Example: data can be withdrawn from the repository but cannot be retrieved after they are released.

Participants may change their mind and request they not be contacted in the future at a later time. This request will be coded accordingly so that study researchers will not disclose their identifiers in the future. Participant identifiers cannot be retrieved, however, after they are released.

g. Agreements for sharing or release. Confirm by checking the box that you will comply with UW (and, if applicable, UW Medicine) policies that require a formal agreement between you and the recipient for release of data or specimens to individuals or entities other than federal databases.

Data Use Agreements or Gatekeeping forms are used for data; Material Transfer Agreements are used for specimens (or specimens plus data). Do not attach your template agreement forms; the IRB neither reviews nor approves them

x	**Confirmed**

5.12 Communication with subjects during the study. Describe the types of communication (if any) you will have with already-enrolled subjects during the study. Provide a description instead of the actual materials themselves.

Examples: email, texts, phone, or letter reminders about appointments or about returning study materials such as a questionnaire; requests to confirm contact information.

Subjects will be contacted via email to complete online assessments and receive phone calls from study clinicians for treatment. Participants will also receive phone calls, emails, and/or texts for any study appointments, treatment sessions, and/or upcoming assessment periods. Study staff will email the dates and times of any treatment sessions or assessments for participants in both the E-TIPS intervention and the Usual Care group. The treatment schedules will also include the Zoom phone numbers that therapists will use to administer treatment to participants assigned to E-TIPS.

Participant payments (in the form of checks) will be accompanied by a payment cover letter stating the amount enclosed and to which assessments the payment applies.

If a participant is unable to be reached at any point during the study, research staff will use phone, text, email, secure messaging, and/or letters to try and get a hold of the participant. We may also call, email, or mail the collateral contacts for participants who provided such information if we are still unable to reach the participant.

5.13 Future contact with subjects. Do you plan to retain any contact information you obtain for your subjects so that they can be contacted in the future?

[ ] **No**
[x] **Yes** → If yes, describe the purpose of the future contact, and whether use of the contact information will be limited to your team; if not, describe who else could be provided with the contact information. Describe your criteria for approving requests for the information.

Examples: inform subjects about other studies; ask subjects for additional information or medical record access that is not currently part of the study proposed in this application; obtain another sample.

We would like to retain contact information so if a participant is interested in published results, we may notify him/her or send them information about the results.

5.14 Alternatives to participation. Are there any alternative procedures or treatments that might be advantageous to the subjects?

If there are no alternative procedures or treatments, select "No". Examples of advantageous alternatives: earning extra class credit in some time-equivalent way other than research participation; obtaining supportive care or a standard clinical treatment from a health care provider instead of participating in research with an experimental drug.

[x] **No**
[ ] **Yes** → If yes, describe the alternatives.

There are no specific alternative procedures. However, researchers will suggest in the consent form that participants discuss other options for pain management with their health care provider.

5.15 Upload to the Supporting Documents SmartForm of ***Zipline*** all data collection forms (if any) that will be directly used by or with the subjects, and any scripts/talking points you will use to collect the data. Do not include data collection forms that will be used to abstract data from other sources (such as medical or academic records, or video recordings.

- ***Examples****: survey, questionnaires, subject logs or diaries, focus group questions.*
- ***NOTE:*** *Sometimes the IRB can approve the general content of surveys and other data collection instruments rather than the specific form itself. This prevents the need to submit a modification request for future minor changes that do not add new topics or increase the sensitivity of the questions. To request this general approval, use the text box below to identify the questionnaires/surveys/ etc. for which you are seeking this more general approval. Then briefly describe the scope of the topics you will cover and the most personal and sensitive questions. The HSD staff person who screens this application will let you know whether this is sufficient or whether you will need to provide more information.*
- ***For materials that cannot be uploaded****: upload screenshots or written descriptions that are sufficient to enable the IRB to understand the types of data that will be collected and the nature of the experience for the participant. You may also provide URLs (website addresses) or written descriptions below. Examples of materials that usually cannot be uploaded: mobile apps; computer-administered test; licensed and restricted standardized tests.*
- ***For data that will be gathered in an evolving way****: This refers to data collection/questions that are not pre-determined but rather are shaped during interactions with participants in response to observations and responses made during those interactions. If this applies to your research, provide a description of the process by which you will establish the data collection/questions as you interact with subjects, how you will document your data collection/questions, the topics you plan to address, the most sensitive type of information you will plan to gather, and the limitations (if any) on topics you will raise or pursue.*

Use this text box (if desired) to provide:

- Short written descriptions of materials that cannot be uploaded, such as URLs
- A description of the process you will use for data that will be gathered in an evolving way.
- The general content of questionnaires, surveys and similar instruments for which you are seeking general approval. (See the **NOTE** bullet point in the instructions above.)

We will have participants complete standardized measures asking about pain interference, pain intensity, pain self-efficacy, fatigue severity, depressive symptoms, sleep disturbance, vocational outcomes, social roles and activities, pain anxiety, and the impact of COVID-19 via REDCap surveys. Therapists will make note of treatment attendance via REDCap and ask participants about treatment satisfaction and adherence to home practice.

5.16 Send HSD a Confidentiality Agreement if you will obtain or use any private identifiable UW records without subject's written consent (for example, screening medical records or class grades to identify possible subjects).

The Confidentiality Agreement form must be completed, printed, signed, and mailed to the Human Subjects Division at Box 359470. Your IRB application cannot be approved until we receive the Confidentiality Agreement.

6 CHILDREN (MINORS) and PARENTAL PERMISSION

6.1 Involvement of minors. Does your research include minors (children)?

Minor or child means someone who has not yet attained the legal age for consent for the research procedures, as described in the applicable laws of the jurisdiction in which the research will be conducted. This may or may not be the same as the definition used by funding agencies such as the National Institutes of Health.

- In Washington State the generic age of consent is 18, meaning that anyone under the age of 18 is considered a child.
- There are some procedures for which the age of consent is much lower in Washington State.
- The generic age of consent may be different in other states, and in other countries.

[x] **No** → If no, go to Section 8.

[ ] **Yes** → If yes, provide the age range of the minor subjects for this study and the legal age for consent in your population(s). If there is more than one answer, explain.

[ ] **Don't know** →This means is it not possible to know the age of your subjects. For example, this may be true for some research involving social media, the Internet, or a dataset that you obtain from another researcher or from a government agency. Go to Section 8.

6.2 Parental permission. Parental permission means actively obtaining the permission of the parents. This is not the same as "passive" or "opt out" permission where it is assumed that parents are allowing their children to participate because they have been provided with information about the research and have not objected or returned a form indicating they don't want their children to participate.

a. Will you obtain parental permission for:

[ ] All of your research procedures → Go to question **6.2b.**

☐ None of your research procedures → Use the table below to provide your justification, and skip question 6.2b.

☐ Some of your research procedures → Use the table below to identify the procedures for which you will not obtain written parental permission.

Be sure to consider all research procedures and plans, including screening, future contact, and sharing/banking of data and specimens for future work.

Children Group[1]	Describe the procedures or data/specimen collection (if any) for which there will be NO parental permission[2]	Reason why you will not obtain parental permission	Will you inform them about the research?[3] YES	NO
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

Table footnotes

1. *If your answer is the same for all children groups or all procedures, you can collapse your answer across the groups and/or procedures.*
2. *If you plan to obtain identifiable information or biospecimens without parent permission, any waiver granted by the IRB does not override parents' refusal to provide broad consent (for example, through the Northwest Biotrust).*
3. *Will you inform them about the research beforehand even though you are not obtaining active permission?*

b. Indicate by checking the appropriate box(es) your plan for obtaining parental permission

☐ Both parents, unless one parent is deceased, unknown, incompetent, or not reasonably available; or when only one parent has legal responsibility for the care and custody of the child

☐ One parent, even if the other parent is alive, known, competent, reasonably available, and shares legal responsibility for the care and custody of the child.

This is all that is required for minimal risk research.

If you checked both boxes, explain:

6.3 Children who are wards. Will any of the children be wards of the State or any other agency, institution, or entity?

☒ **No**

☐ **Yes** → If yes, an advocate may need to be appointed for each child who is a ward. The advocate must be in addition to any other individual acting on behalf of the child as guardian or in loco parentis. The same individual can serve as advocate for all children who are wards.

Describe who will be the advocate(s). Your answer must address the following points:

- Background and experience
- Willingness to act in the best interests of the child for the duration of the research
- Independence of the research, research team, and any guardian organization

7 ASSENT OF CHILDREN (MINORS)

Go to Section 8 if your research does not involve children (minors).

7.1 Assent of children (minors). Though children do not have the legal capacity to "consent" to participate in research, they should be involved in the process if they are able to "assent" by having a study explained to them and/or by reading a simple form about the study, and then giving their verbal choice about whether they want to participate. They may also provide a written assent if they are older. See **WORKSHEET: Children** for circumstances in which a child's assent may be unnecessary or inappropriate.

a. Will you obtain assent for:

☐ All of your research procedures and child groups	→ Go to question **7.2.**
☐ None of your research procedures and child groups	→ Use the table below to provide your justification, then skip to question 7.5.
☐ Some of your research procedures and child groups	→ Use the table below to identify the procedures for which you will not obtain assent.

Be sure to consider all research procedures and plans, including screening, future contact, and sharing/banking of data and specimens for future work.

Children Group[1]	Describe the procedures or data/specimen collection (if any) for which assent will NOT be obtained	Reason why you will not obtain assent

Table footnotes

1. *If your answer is the same for all children groups or all procedures, you can collapse your answer across the groups and/or procedures.*

7.2 Assent process. Describe how you will obtain assent, for each child group. If your research involves children of different ages, answer separately for each group. If the children are non-English speakers, include a description of how you will ensure that they comprehend the information you provide.

7.3 Dissent or resistance. Describe how you will identify a child's objection or resistance to participation (including non-verbal indications) during the research, and what you will do in response.

7.4 E-consent. Will you use any electronic processes (email, websites, electronic signatures, etc.) to present assent information to subjects/and or to obtain documentation (signatures) of assent? If yes, describe how you will do this.

7.5 Documentation of assent. Which of the following statements describes whether you will obtain documentation of assent?

☐ None of your research procedures and child groups	→ Use the table below to provide your justification, then go to question **7.5.a**
☐ All of your research procedures and child groups	→ Go to question **7.5.a**, do not complete the table
☐ Some of your research procedures and/or child groups	→ Complete the table below and then to go question **7.5.a**

Children Group[1]	Describe the procedures or data/specimen collection (if any) for which assent will NOT be documented

Table footnotes

1. *If your answer is the same for all children groups or all procedures, you can collapse your answer across the groups and/or procedures.*

a. Describe how you will document assent. If the children are functionally illiterate or are not fluent in English, include a description of what you will do.

b. Upload all assent materials (talking points, videos, forms, etc.) to the **Consent Form and Recruitment Materials** SmartForm of ***Zipline***. Assent materials are not required to provide all of the standard elements of adult consent; the information should be appropriate to the age, population, and research procedures. The documents should be in Word, if possible.

7.6 Children who reach the legal age of consent during participation in longitudinal research.

Children who were enrolled at a young age and continue for many years: It is best practice to re-obtain assent (or to obtain it for the first time, if you did not at the beginning of their participation).
Children who reach the legal age of consent: You must obtain informed consent from the now-adult subject for (1) any ongoing interactions or interventions with the subjects, or (2) the continued analysis of specimens or data for which the subject's identify is readily identifiable to the researcher, unless the IRB waives this requirement.

a. Describe your plans (if any) to re-obtain assent from children.

b. Describe your plans (if any) to obtain consent for children who reach the legal age of consent.

- If you plan to obtain consent, describe what you will do about now-adult subjects whom you are unable to contact.
- If you do not plan to obtain consent or think that you will be unable to do so, explain why.

7.7 Other regulatory requirements. (This is for your information only; no answer or response is required.)
Researchers are responsible for determining whether their research conducted in schools, with student records, or over the Internet comply with permission, consent, and inspection requirements of the following federal regulations:

- PPRA – Protection of Pupil Rights Amendment
- FERPA – Family Education Rights and Privacy Act
- COPPA – Children's Online Privacy Protection Act

8 CONSENT OF ADULTS

Review the following definitions before answering the questions in this section.

CONSENT	is the process of informing potential subjects about the research and asking them whether they want to participate. It usually (but not always) includes an opportunity for subjects to ask questions. It does not necessarily include the signing of a consent form. This question is about the consent process.
CONSENT DOCUMENTATION	refers to how a subject's decision to participate in the research is documented. This is typically obtained by having the subject sign a consent form.
CONSENT FORM	is a document signed by subjects, by which they agree to participate in the research as described in the consent form and in the consent process.
ELEMENTS OF CONSENT	are specific information that is required to be provided to subjects.
PARENTAL PERMISSION	is the parent's active permission for the child to participate in the research. Parental permission is subject to the same requirements as consent, including written documentation of permission and required elements.

SHORT FORM CONSENT	is an alternative way of obtaining written documentation of consent that is most commonly used with individuals who are illiterate or whose language is one for which translated consent forms are not available.
WAIVER OF CONSENT	means there is IRB approval for not obtaining consent or for not including some of the elements of consent in the consent process. **NOTE**: If you plan to obtain identifiable information or identifiable biospecimens without consent, any waiver granted by the IRB does not override a subject's refusal to provide broad consent (for example, the Northwest Biotrust).
WAIVER OF DOCUMENTATION OF CONSENT	means that there is IRB approval for not obtaining written documentation of consent.

8.1 Groups Identify the groups to which your answers in this section apply.

- [x] Adult subjects
- [ ] Parents who are providing permission for their children to participate in research

→ *If you selected **PARENTS**, the word "consent" below should also be interpreted as applying to parental permission and "subjects" should also be interpreted as applying to the parents.*

8.2 The consent process. This series of questions is about whether you will obtain consent for all procedures except recruiting and screening and, if yes, how.

The issue of consent for recruiting and screening activities is addressed in question 4.6. You do not need to repeat your answer to question 4.6.

a. Are there any procedures for which you will not obtain consent?

- [x] **No**
- [ ] **Yes** → If yes, use the table below to identify the procedures for which you will not obtain consent. "All" is an acceptable answer for some studies.

Be sure to consider all research procedures and plans, including future contact, and sharing/banking of data and specimens for future work.

Group[1]	Describe the procedures or data/specimen collection (if any) for which there will be NO consent process	Reason why you will not obtain consent	Will you provide subjects with info about the research after they finish? YES	NO
			☐	☐
			☐	☐
			☐	☐

Table footnotes

1. *If your answer is the same for all groups you can collapse your answer across the groups and/or procedures.*

b. Describe the consent process**,** if you will obtain consent for any or all procedures, for any or all groups. Address groups and procedures separately if the consent processes are different.

Be sure to include:

- *The location/setting where consent will be obtained*
- *Who will obtain consent (refer to positions, roles, or titles, not names).*
- *Whether/how you will provide an opportunity for questions*
- *How you will provide an adequate opportunity for the subjects to consider all options*

Research staff (Research Study Assistant, Research Study Coordinator, and/or Research Coordinator) will participate in and obtain informed consent from research participants after screening but prior to commencement of any further study procedures. Prospective participants will also be asked for consent to complete the screening questions at the start of the screening process. The informed consent process will take place over the telephone at a time deemed mutually feasible for the participant and staff member and coordinated on a case-by-case basis.

Prior to the informed consent process, research staff will email (or postal mail, if the participant prefers) a copy of an information statement for the participant to review as well as the date and time of the consent process appointment. Participants will be encouraged to read the information statement prior to the scheduled consent session and to be prepared with any questions. If the informed consent session is scheduled more than two business days in advance, research staff will call and/or email participants as a reminder. Participants will be requested to have the information statement in front of them during the consent session.

A research staff member will review each section of the information statement approved by the UW IRB, inviting discussion to ensure comprehension. Staff will be trained by study investigators to ensure competency to discuss informed consent and strategies to ensure there is no coercion.

Participants will be provided with as much time as needed to review the information statement and ask the research staff member questions about the information statement, their rights as human participants, and participation in the study. Potential participants will be fully informed of all risks and benefits prior to giving their verbal informed consent and prior to enrollment in the study. Potential participants will also be informed that providing consent for enrollment into the study does not guarantee assignment to the treatment intervention initially, as this is contingent on completing certain required baseline procedures (see Section 5.1 – Procedures) and on being randomly assigned to the treatment group. They will be told that participants randomized to usual care will have the opportunity to receive the treatment at the end of the 6-month follow-up assessment.

If during the course of this contact the potential participant has questions that cannot be addressed by research staff, one of the study investigators or the research manager (depending on the nature of the questions) will follow up with the potential participant to answer the questions. Participants may take time to think about participating and render a decision at a subsequent time.

Potential participants will be asked to repeat back to research staff their understanding of the information statement material as necessary. Individuals will not be permitted to participate if there is any question as to whether a person has capacity to provide informed consent.

When all questions have been answered, research staff will ask the participant if they would like to participate in the study. The participant will then be asked to provide verbal consent to participate. The participant will not need to sign the information statement, as we will be applying for a Waiver of Documentation of Informed Consent with this IRB application.

c. Comprehension**.** Describe how you will ensure or test the subjects' understanding of the information during the consent process.

A staff member will review each section of the information statement (see document "Information Statement"). Participants will be provided with as much time as needed to review and ask questions about the information statement, their rights as human participants, and participation in the study. If the potential recruit has questions that cannot be addressed by staff, a study investigator or the Research Manager (depending on the nature of the questions) will follow up to answer the questions. Participants may take time to think about participating and render a decision at a later time. Staff will ask the participant to provide a summary of the study (e.g., purpose of the study, number/types of interventions, number/types of sessions/appointments, number/duration of assessment periods, length of study participation, etc.) to assess for comprehension as necessary. Inaccurate information will be corrected and re-explained until the participant understands. We will not enroll any participants who we feel do not have a good understanding of the study, its procedures, or what participation entails as these participants do not meet the criteria for "informed" consent. These participants will be thanked for their time and given additional resources (i.e., a Resource List).

d. Influence**.** Does your research involve any subject groups that might find it difficult to say "no" to your research because of the setting or their relationship with you, even if you don't pressure them to participate?

Examples: Student participants being recruited into their teacher's research; patients being recruited into their healthcare provider's research, study team members who are participants; outpatients recruited from an outpatient surgery waiting room just prior to their surgery.

[x] **No**

[ ] **Yes** → If yes, describe what you will do, for each of these subject groups, to reduce any effect of the setting or relationship on their decision.

Examples: a study coordinator will obtain consent instead of the subjects' physician; the researcher will not know which subjects agreed to participate; subjects will have two days to decide after hearing about the study.

e. Ongoing process. For research that involves multiple or continued interaction with subjects over time, describe the opportunities (if any) you will give subjects to ask questions or to change their minds about participating.

At the beginning of the informed consent process, all participants will be told that participation in research is voluntary and they are not obligated to participate. Anyone can refuse to participate at any time and withdraw from the study at any time for whatever reason without penalty or loss of benefits (a participant can withdraw without even providing a reason, if s/he chooses). We will stress this at the beginning and end of the consent

session. We will also ask the participant if s/he has any questions before we ask for their decision to be in the study. Throughout our studies, we have always encouraged participants to ask questions when there is something they do not understand and will continue to encourage this by asking the participant if s/he has any questions before beginning any procedures (i.e., after explaining any procedure, ask the participant if s/he has any questions before starting). For assessments or questionnaires, we will always tell the participant at the beginning of the assessment they are free to not answer any question for whatever reason. We will always honor a participant's decision to stop any procedures, even after they have commenced. We will also re-iterate the possibility of withdrawal without consequence if a participant expresses apprehension/dissatisfaction with completing study procedures.

8.3 Electronic presentation of consent information. Will any part of the consent-related information be provided electronically for some or all of the subjects?

This refers to the use of electronic systems and processes instead of (or in addition to) a paper consent form. For example, an emailed consent form, a passive or an interactive website, graphics, audio, video podcasts. See GUIDANCE: Electronic Informed Consent for information.

[x] **No** → If no, skip to question 8.4
[ ] **Yes** → If yes, answer questions **a** through **e**

a. Describe your methodology and the information that will be provided.

All informational materials must be made available to the IRB. Website content should be provided as a Word document. It is considered best practice to give subjects information about multi-page/multi-screen information that will help them assess how long it will take them to complete the process. For example, telling them that it will take about 15 minutes, or that it involves reading six screens or pages.

b. Describe how the information can be navigated (if relevant). *For example, will the subject be able to proceed forward or backward within the system, or to stop and continue at a later time?*

c. In a standard paper-based consent process, the subjects generally have the opportunity to go through the consent form with study staff and/or to ask study staff about any question they may have after reading the consent form. Will that be possible in your study? Also, describe what, if anything, you will do to facilitate the subject's comprehension and opportunity to ask questions when consent information is presented electronically. Include a description of any provisions to help ensure privacy and confidentiality during this process.

Examples: hyperlinks, help text, telephone calls, text messages or other type of electronic messaging, video conference, live chat with remotely located study team members.

d. What will you do if you encounter individuals who wish to participate but who do not have access to the methodology you are using or who do not wish to use it? Are there alternative ways in which they can obtain the information, or will there be some assistance available? If this is a clinical trial, you cannot exclude these individuals from your study unless you have a compelling rationale. *For example, consider individuals who lack familiarity with electronic systems, have poor eyesight or impaired motor skills, or who do not have easy email or internet access.*

e. How will you provide additional information, including any significant new findings (such as new risk information) to subjects during the research? If this is not an issue, explain why.

8.4 Written documentation of consent. Which of the statements below describe whether you will obtain documentation of consent? NOTE: This question does not apply to screening and recruiting procedures which have already been addressed in question 4.6.

Documentation of consent that is obtained electronically is not considered written consent unless it is obtained by a method that allows verification of the individual's signature. In other words, saying "yes" by email is rarely considered to be written documentation of consent

a. Are you obtaining written documentation of consent for:

[x] None of your research procedures	→ Use the table below to provide your justification then go to question **8.5.**
[ ] All of your research procedures	→ Do not complete the table; go to question **8.5.**
[ ] Some of your research procedures	→ Use the table below to identify the procedures for which you will not obtain written documentation of consent from your adult subjects.

Adult subject group[1]	Describe the procedures or data/specimen collection (if any) for which there will be NO documentation of consent	Will you provide them with a written statement describing the research (optional)? YES	NO
		[ ]	[ ]
		[ ]	[ ]
		[ ]	[ ]
		[ ]	[ ]
		[ ]	[ ]

Table footnotes

1. *If your answer is the same for all adult groups or all procedures, you can collapse your answer across the groups and/or procedures.*

b. Electronic consent signature. For studies in which documentation of consent will be obtained: will subjects use an electronic method to provide their consent signature?

- *FDA-regulated studies must use a system that complies with the FDA's "Part 11" requirements about electronic systems and records. Note that the the UW-IT supported DocuSign e-signature system does not meet this requirement.*
- *Having subjects check a box at the beginning of an emailed or web-based questionnaire is not considered legally effective documentation of consent.*

[x] **No**

[ ] **Yes** → If yes, describe the methodology you will use.

See the GUIDANCE: Electronic Informed Consent for information about options (including the DocuSign system available through UW-IT) and requirements.

b.1 Is this method legally valid in the jurisdiction where the research will occur?

[ ] **No**

[ ] **Yes** → If yes, what did you use as your source of information about legal validity?

b.2 Will you obtain verification of the subject's identity if the signature is not personally witnessed by a member of the study team? Note that this is required for FDA-regulated studies.

See the GUIDANCE: Electronic Informed Consent for information and examples

[ ] **No** →If no, provide your rationale for why this is appropriate. Also, what would be the risks to the actual subject if somebody other than the intended signer provides the consent signature?

[ ] **Yes** →If yes, how?

b.3 How will you meet the requirement to provide a copy of the consent information (consent form) to individuals who provide an e-signature?

The copy can be paper or electronic and may be provided on an electronic storage device or via email. If the electronic consent information uses hyperlinks or other websites or podcasts to convey information specifically related to the research, the information in these hyperlinks should be included in the copy provided to the subjects and the website must be maintained for the duration of the entire study.

8.5 Non-English-speaking or -reading adult subjects. Will you enroll adult subjects who do not speak English or who lack fluency or literacy in English?

[x] **No**
[ ] **Yes** → If yes, describe the process you will use to ensure that the oral and written information provided to them during the consent process and throughout the study will be in a language readily understandable to them and (for written materials such as consent forms or questionnaires) at an appropriate reading/comprehension level.

a. Interpretation. Describe how you will provide interpretation and when. Also, describe the qualifications of the interpreter(s) – for example, background, experience, language proficiency in English and in the other language, certification, other credentials, familiarity with the research-related vocabulary in English and the target language.

b. Translations. Describe how you will obtain translations of all study materials (not just consent forms) and how you will ensure that the translations meet the UW IRB's requirement that translated documents will be linguistically accurate, at an appropriate reading level for the participant population, and culturally sensitive for the locale in which they will be used.

8.6 Barriers to written documentation of consent. There are many possible barriers to obtaining written documentation of consent. Consider, for example, individuals who are functionally illiterate; do not read English well; or have sensory or motor impairments that may impede the ability to read and sign a consent form.

a. Describe your plans (if any) for obtaining written documentation of consent from potential subjects who may have difficulty with the standard documentation process (that is, reading and signing a consent form). Skip this question if you are not obtaining written documentation of consent for any part of your research.

Examples of solutions: Translated consent forms; use of the Short Form consent process; reading the form to the person before they sign it; excluding individuals who cannot read and understand the consent form.

8.7 Deception. Will you deliberately withhold information or provide false information to any of the subjects? *Note: "Blinding" subjects to their study group/condition/arm is not considered to be deception.*

[x] **No**
[ ] **Yes** → If yes, describe what information and why.
Example: you may wish to deceive subjects about the purpose of the study.

a. Will you debrief the subjects later? (Note: this is not required.)

☐ **No**
☐ **Yes** → If yes, describe how you will debrief the subjects. Upload any debriefing materials, including talking points or a script, to the **Consent Form and Recruitment Materials** SmartForm of ***Zipline***.

8.8 Cognitively impaired adults, and other adults unable to consent. Do you plan to include such individuals in your research?

Examples: individuals with Traumatic Brain Injury (TBI) or dementia; individuals who are unconscious, or who are significantly intoxicated.

☒ **No** → If no, go to question **8.9**.
☐ **Yes** → If yes, answer the following questions.

a. Rationale. Provide your rationale for including this population in your research.

b. Capacity for consent / decision making capacity. Describe the process you will use to determine whether a cognitively impaired individual is capable of consent decision making with respect to your research protocol and setting.

b.1. If you will have repeated interactions with the impaired subjects over a time period when cognitive capacity could increase or diminish, also describe how (if at all) you will reassess decision-making capacity and obtain consent during that time.

c. Permission (surrogate consent). If you will include adults who cannot consent for themselves, describe your process for obtaining permission ("surrogate consent") from a legally authorized representative (LAR).

*For research conducted in Washington State, see the **SOP: Legally Authorized Representative** to learn which individuals meet the state definition of "legally authorized representative".*

d. Assent. Describe whether assent will be required of all, some, or none of the subjects. If some, indicate which subjects will be required to assent and which will not (and why not). Describe any process you will use to obtain and document assent from the subjects.

e. Dissent or resistance. Describe how you will identify the subject's objection or resistance to participation (including non-verbal) during the research, and what you will do in response.

8.9 Consent-related materials. Upload to the **Consent Forms and Recruitment Materials** SmartForm of ***Zipline*** all consent scripts/talking points, consent forms, debriefing statements, Information Statements, Short Form consent forms, parental permission forms, and any other consent-related materials you will use.

- *Translations must be included. However, you are strongly encouraged to wait to provide them until you know that the IRB will approve the English versions.*
- *Combination forms: It may be appropriate to combine parental permission with consent, if parents are subjects as well as providing permission for the participation of their children. Similarly, a consent form may be appropriately considered an assent form for older children.*
- *For materials that cannot be uploaded: upload screenshots or written descriptions that are sufficient to enable the IRB to understand the types of data that will be collected and the nature of the experience for the participant. You may also provide URLs (website addresses) or written descriptions below. Examples of materials that usually cannot be uploaded: mobile apps; computer-administered test; licensed and restricted standardized tests.*

9 PRIVACY AND CONFIDENTIALITY

9.1 Privacy protections. Describe the steps you will take, if any, to address possible privacy concerns of subjects and potential subjects.

Privacy refers to the sense of being in control of access that others have to ourselves. This can be an issue with respect to recruiting, consenting, sensitivity of the data being collected, and the method of data collection.
Examples:

- *Many subjects will feel a violation of privacy if they receive a letter asking them to participate in a study because they have ____ medical condition, when their name, contact information, and medical condition were drawn from medical records without their consent. Example: the IRB expects that "cold call" recruitment letters will inform the subject about how their information was obtained.*
- *Recruiting subjects immediately prior to a sensitive or invasive procedures (e.g., in an outpatient surgery waiting room) will feel like an invasion of privacy to some individuals.*
- *Asking subjects about sensitive topics (e.g. details about sexual behavior) may feel like an invasion of privacy to some individuals.*

All prospective participants will be informed of how their information was obtained by telephone.

All participants will be assigned a unique study code that serves as the link between the data collected for the study and participants' identity. Any hard copies of participants' direct identifiers will be kept in a separate locked filing cabinet (in which only research staff will have keys) from study data. Participant identifiers will be kept in a password-protected database on the department's secure server and in the password-protected REDCAP databases. The link between the study data and a participant's identity in the form of the unique study code will only exist in the password-protected database on the department's secure server, which has restricted access, and in the password-protected REDCap databases.

Treatment sessions (audio only) recorded for fidelity purposes and the recorded post-treatment qualitative interview may contain direct identifiers as voice data is an identifier; additionally, the clinician/staff member may state the participant's first name during the session/interview. The audio recordings will not be labeled with any identifying information. These audio recordings will be stored on our department's secure server.

9.2 Identification of individuals in publications and presentations. Do you plan to use potentially identifiable information about subjects in publications and presentations, or is it possible that individual identities could be inferred from what you plan to publish or present?

[x] **No**
[ ] **Yes** → If yes, will you obtain subject consent for this use?
  [ ] **Yes**
  [ ] **No** → If no, describe the steps you will take to protect subjects (or small groups of subjects) from being identifiable.

9.3 State mandatory reporting. Each state has reporting laws that require some types of individuals to report some kinds of abuse, and medical conditions that are under public health surveillance. These include:

- Child abuse
- Abuse, abandonment, neglect, or financial exploitation of a vulnerable adult
- Sexual assault
- Serious physical assault
- Medical conditions subject to mandatory reporting (notification) for public health surveillance

Are you or a member of your research team likely to learn of any of the above events or circumstances while conducting your research **AND** feel obligated to report it to state authorities?

[x] **No**
[ ] **Yes** → If yes, the UW IRB expects you to inform subjects of this possibility in the consent form or during the consent process, unless you provide a rationale for not doing so:

9.4 Retention of identifiers and data. Check the box below to indicate your assurance that you will not destroy any identifiers (or links between identifiers and data/specimens) and data that are part of your research records until after the end of the applicable records retention requirements (e.g. Washington State; funding agency or sponsor; Food and Drug Administration) for your research. If you think it is important for your specific study to say something about destruction of identifiers (or links to identifiers) in your consent form, state something like "the link between your identifier and the research data will be destroyed after the records retention period required by state and/or federal law."

This question can be left blank for conversion applications (existing paper applications that are being "converted" into a Zipline application.)

See the "Research Data" sections of the following website for UW Records management for the Washington State research rectords retention schedules that apply in general to the UW (not involving UW Medicine data):
http://f2.washington.edu/fm/recmgt/gs/research?title=R

See the "Research Records and Data" information in Section 8 of this document for the retention schedules for UW Medicine Records: ***https://www.uwmedicine.org/about/Documents/UWM-Records-Retention-Schedule.pdf***

[x] **Confirm**

9.5 Certificates of Confidentiality. Are you planning to obtain a federal Certificate of Confidentiality for your research data? *NOTE: Answer "No" if your study is NIH funded, because all NIH-funded studies automatically have a Certificate.*

- [x] **No**
- [ ] **Yes**

9.6 Data and specimen security protections. Identify your data classifications and the security protections you will provide, referring to the ***ZIPLINE* GUIDANCE: Data and Security Protections** for the minimum requirements for each data classification level. ***You cannot answer this question without reading this document. Data security protections should not conflict with records retention requirements.***

a. Which level of protections will you apply to your data and specimens? If you will use more than one level, describe which level will apply to which data and which specimens.

Level 4

b. Use this space to provide additional information, details, or to describe protections that do not fit into one of the levels. If there are any protections within the level listed in 9.6.a which you will *not* follow, list those here.

The pre-screening survey is an exception to Level 4 security. Access to participant identifiers from the pre-screening survey will be limited to research study coordinators involved with recruitment and all identifiers in WebQ will require a UW Net ID and password to access. After the data is no longer needed (i.e., participants have been contacted and/or screened), and the required records retention period has ended, the data will be deleted.

10 RISK / BENEFIT ASSESSMENT

10.1 Anticipated risks. Describe the reasonably foreseeable risks of harm, discomforts, and hazards to the subjects and others of the research procedures. For each harm, discomfort, or hazard:

- Describe the magnitude, probability, duration, and/or reversibility of the harm, discomfort, or hazard, AND
- Describe how you will manage or reduce the risks. Do not describe data security protections here, these are already described in Question 9.6.

- *Consider possible physical, psychological, social, legal, and economic harms, including possible negative effects on financial standing, employability, insurability, educational advancement or reputation. For example, a breach of confidentiality might have these effects.*
- *Examples of "others": embryo, fetus, or nursing child; family members; a specific group.*
- *Do not include the risks of non-research procedures that are already being performed.*
- *If the study design specifies that subjects will be assigned to a specific condition or intervention, then the condition or intervention is a research procedure - even if it is a standard of care.*
- *Examples of mitigation strategies: inclusion/exclusion criteria; applying appropriate data security measures to prevent unauthorized access to individually identifiable data; coding data; taking blood samples to monitor something that indicates drug toxicity.*
- *As with all questions on this application, you may refer to uploaded documents.*

General/Reaction to Assessments
Regarding research risks, participants may experience fatigue and/or boredom while completing the assessments and/or the treatment sessions.

Some participants may also experience mild anxiety, frustration, and/or stress while answering sensitive questions about depression, pain, and mood. As a result of answering questions about pain, some participants may focus more on their pain, which may lead to a temporary increase in pain intensity.

Protections against risks: Participants will be informed during the consent process and throughout the study they do not have to discuss any topics they do not wish to during treatment or the assessment periods. In addition, participants will be informed in the consent process they are free to stop any session, treatment, or assessment at any time. Participants are informed they may refuse to answer any questions that make them feel uncomfortable.

All participants will be clearly informed of their right to withdraw from the study at any point without adversely impacting their routine medical, psychiatric, or psychotherapeutic care.

All participants will be offered the opportunity to discuss any situations or experiences associated with the study procedures that they deem uncomfortable or adverse with the UW PI, Dr. Ehde, who is a licensed clinical psychologist. Dr. Ehde is a trained psychologist who has experience assessing the level of distress of patients and proceeding accordingly whenever an adverse event should arise.

Treatment

The types of treatment involve discussions about disabilities and related topics that may make some individuals feel uncomfortable. Some participants may also experience mild anxiety, frustration, and/or stress during the course of treatment should any topics or activities prove difficult for them. Some individuals learning cognitive restructuring of thoughts may remember past experiences that are uncomfortable and/or cause distress, even after the session has ended.

Protections against risks: Researchers will take multiple steps to ensure and monitor the well-being of participants during treatment. Study investigators, led by Dr. Ehde, will offer ongoing, scheduled supervision and consultation with study clinicians, including routine assessment of any potential problems or adverse events.

Privacy and Confidentiality

Participants may also worry about the confidentiality of their responses during the assessments. There is a risk of invasion of privacy in that the research staff directly involved with data collection will need to keep participants' names, addresses (email and postal), and phone numbers for the duration of the study in order to contact them for the follow-up assessments.

Protections against risks: We will take multiple steps to protect participants' privacy and confidentiality. All of the data collected from participants will be kept in strict confidence. No information that is linked to a research participant's identity will be provided to anyone outside of the study or regulatory entities responsible for oversight without permission from the participant.

Mental Health Issues / Suicidality

Although unlikely, it is possible that by participating in the study it may be discovered that a participant is suicidal or experiencing significant mental health issues. Please note that these conditions would also likely be detected in the course of usual care.

Protections against risks: Although the study poses no serious risks to participants, participants may notify research personnel about pre-existing mental health issues that have not been previously identified. A suicide risk assessment protocol will be implemented by staff and, as indicated, the study clinicians and investigators (see document "Suicide Protocol").

10.2 Reproductive risks. Are there any risks of the study procedures to men and women (who are subjects, or partner of subjects) related to pregnancy, fertility, lactation or effects on a fetus or neonate?

Examples: direct teratogenic effects; possible germline effects; effects on fertility; effects on a woman's ability to continue a pregnancy; effects on future pregnancies.

[x] **No** → If no go to question 10.3

[ ] **Yes** → If yes, answer the following questions:

a. Risks. Describe the magnitude, probability, duration and/or reversibility of the risks.

b. Steps to minimize risk. Describe the specific steps you will take to minimize the magnitude, probability, or duration of these risks.

Examples: inform the subjects about the risks and how to minimize them; require a pregnancy test before and during the study; require subjects to use contraception; advise subjects about banking of sperm and ova.

If you will require the use of contraception: describe the allowable methods and the time period when contraception must be used.

c. Pregnancy. Describe what you will do if a subject (or a subject's partner) becomes pregnant

For example; will you require the subject to immediately notify you, so that you can discontinue or modify the study procedures, discuss the risks, and/or provide referrals or counseling?

10.3 MRI risk management. *Answer this question only if your subjects will receive MRI scans*. A rare but serious adverse reaction called nephrogenic systemic fibrosis (NSF) has been observed in individuals with kidney disease who received gadolinium-based contrast agents (GBCAs) for the scans. Also, a few healthy individuals have a severe allergic reaction to GBCAs.

a. Describe how you will assess the renal function of your subjects prior to MRI scans and how you will use that information to exclude subjects at risk for NSF.

b. Describe your protocol for handling a sever allergic reaction to the GBCA or any other medical event/memergency during the MRI scan, including who will be responsible for which actions.

10.4 Unforeseeable risks. Are there any research procedures that may have risks that are currently unforeseeable?

Example: using a drug that hasn't been used before in this subject population.

[x] **No**

[ ] **Yes** → If yes, identify the procedures.

10.5 Subjects who will be under regional or general anesthesiology. Will any research procedures occur while subjects-patients are under general or regional anesthesia, or during the 3 hours preceding general or regional anesthesia (supplied for non-research reasons)?

☐ **No**
☐ **Yes** → If yes, check all the boxes that apply.

- ☐ Administration of any drug for research purposes
- ☐ Inserting an intra-venous (central or peripheral) or intra-arterial line for research purposes
- ☐ Obtaining samples of blood, urine, bone marrow or cerebrospinal fluid for research purposes
- ☐ Obtaining a research sample from tissue or organs that would not otherwise be removed during surgery
- ☐ Administration of a radio-isotope for research purposes**
- ☐ Implantation of an experimental device
- ☐ Other manipulations or procedures performed solely for research purposes (e.g., experimental liver dialysis, experimental brain stimulation)

If you checked any of the boxes:
You must provide the name and institutional affiliation of a physician anesthesiologist who is a member of your research team or who will serve as a safety consultant about the interactions between your research procedures and the general or regional anesthesia of the subject-patients. If your procedures will be performed at a UW Medicine facility or affiliate, the anesthesiologist must be a UW faculty member, and you must consult with the Vice Chair of Clinical Research in the UW Department of Anesthesiology and Pain Medicine for feasibility, safety and billing.

*** If you checked the box about radio-isotopes: you are responsible for informing in advance all appropriate clinical personnel (e.g., nurses, technicians, anesthesiologists, surgeons) about the administration and use of the radio-isotope, to ensure that any personal safety issues (e.g., pregnancy) can be appropriately addressed. This is a condition of IRB approval.*

10.6 Data and Safety Monitoring. A Data and Safety Monitoring Plan (DSMP) is required for clinical trials (as defined by NIH). If required for your research, upload your DSMP to the **Supporting Documents** SmartForm in ***Zipline***. If it is embedded in another document you are uploading (for example, a Study Protocol, use the text box below to name the document that has the DSMP.

MONITORING PROCEDURES
Dr. Ehde assures that informed consent is obtained prior to performing any research procedures, that all subjects meet eligibility criteria, and that the study is conducted according to the IRB-approved research plan.
Study data are accessible at all times for the PI and co-investigators to review. The PI and co-investigators review(s) study conduct accrual, drop outs, deviations from protocol on a semi-annual basis. The PI and co-investigators review(s) AEs individually real-time and in aggregate on a semi-

annual basis. The PI and co-investigators review(s) serious adverse events (SAEs) in real-time. The PI ensures all protocol deviations, AEs, and SAEs are reported to the IRB according to the applicable regulatory requirements.

COLLECTION AND REPORTING OF SAEs AND AEs

For this study, the following standard AE definitions are used:

Adverse event: Any unfavorable and unintended sign (including an abnormal laboratory finding), symptom or disease temporally associated with the use of a medical treatment or procedure, regardless of whether it is considered related to the medical treatment or procedure. Staff will document any occurrence that meets this definition, is a new symptom/condition for the participant, and results in either self-treatment or treatment by a health care provider.

Serious Adverse Event: Any AE that results in any of the following outcomes:

- Death
- Life-threatening
- Event requiring inpatient hospitalization or prolongation of existing hospitalization
- Persistent or significant disability/incapacity

AEs are graded according to the following scale:

Mild: An experience that is transient, & requires no special treatment or intervention. The experience does not generally interfere with usual daily activities. This includes transient laboratory test alterations.

Moderate: An experience that is alleviated with simple therapeutic treatments or minimal, local, and non-invasive intervention. The experience impacts usual daily activities. Includes laboratory test alterations indicating injury, but without long-term risk.

Severe: An experience that requires invasive intervention and/or medical attention. The experience interrupts usual daily activities. If hospitalization (or prolongation of hospitalization) is required for treatment it becomes an SAE. A serious adverse event (SAE) is one that meets one or more of the following criteria: results in death; is life-threatening (places the participant at immediate risk of death from the event as it occurred); results in inpatient hospitalization or prolongation of existing hospitalization; results in a persistent or significant disability or incapacity; or results in a congenital anomaly or birth defect.*

Life-threatening: the event is potentially fatal

*Note: an important medical event that may not result in death, be life threatening, or require hospitalization may be considered an SAE when, based on appropriate medical judgment, the event may jeopardize the participant and may require medical or surgical intervention to prevent one of the outcomes listed in this definition.

The study uses the following AE attribution scale:

Unexpected or unanticipated: Unexpected in terms of nature, severity, or frequency given (a) the research procedures that are described in the protocol-related documents, such as the IRB-approved research protocol and informed consent document; and (b) the characteristics of the participant population being studied

Not related: The AE is clearly not related to the study procedures (i.e., another cause of the event is most plausible and/or a clinically plausible temporal sequence is inconsistent with the onset of the event).

Possibly related: An event that follows a reasonable temporal sequence from the initiation of study procedures, but that could readily have been produced by a number of other factors. There is a reasonable possibility that the incident, experience, or outcome may have been caused by the procedures involved in the research.

Related: The AE is clearly related to the study procedures. May suggest that the research places participants or others at a greater risk of harm (including physical, psychological, economic, or social harm) than was previously known or recognized.

AEs are identified during treatment sessions by asking subjects directly if they have experienced AEs. Other research staff may also identify AEs during recruitment calls, scheduling calls, or other conversations with participants.

SAEs and specific procedure-associated AEs are reported to the IRB and sponsor within 24 hours. In addition, all AEs are reported according to the UW IRB AE reporting guidelines.

MANAGEMENT OF RISKS TO SUBJECTS

Expected AEs

Expected AEs associated with the study procedures include:

- Discomfort when talking about pain
- Boredom completing questionnaires

AE Management

Subjects may end any treatment without negative consequences whenever they want.

DATA ANALYSIS PLANS

Data will be kept in a secure database. Data will be accessed by trained study members. The de-identified data will be reviewed and analyzed by a trained statistician.

PLAN FOR DATA MANAGEMENT

Compliance of regulatory documents and study data accuracy and completeness will be maintained through an internal study team quality assurance process.

Confidentiality throughout the trial is maintained by the research assistants, coordinators, and PI.

Training and Fidelity. Dr. Ehde will train and supervise the therapists; she is a psychologist with >20 years of expertise in the study populations and intervention. Therapists will receive 20 hours of training in E-TIPS which will include readings, didactic presentations, and practice sessions. Dr. Ehde will review recorded practice sessions and provide additional training as needed. A fidelity protocol will include protocol checklists of prescribed, proscribed, common, and unique elements; weekly supervision meetings; and ongoing review of randomly selected recordings from 20% of all sessions. If fidelity problems occur, Dr. Ehde will provide feedback, additional coaching, practice, and monitoring until the therapist delivers the treatment as intended. Similar procedures in past RCTs have yielded fidelity rates exceeding 98%.

10.7 Un-blinding. If this is a double-blinded or single-blinded study in which the participant and/or you do not know the group to which the participant is assigned: describe the circumstances under which un-blinding would be necessary, and to whom the un-blinded information would be provided.

10.8 Withdrawal of participants. If applicable, describe the anticipated circumstances under which participants will be withdrawn from the research without their consent. Also, describe any procedures for orderly withdrawal of a participant, regardless of the reason, including whether it will involve partial withdrawal from procedures and any intervention but continued data collection or long-term follow-up.

Participants could potentially be withdrawn without consent. In the past this has been very rare. Typically happening in instances where the participant becomes unable to contact despite frequent calls from study staff. PIs also reserve the right to withdraw subjects if they feel it is in their best interest (in cases where procedures could be contributing to suicidal ideation). However, suicidal ideation is not expected to be a risk in this study.

10.9 Anticipated direct benefits to participants. If there are any direct research-related benefits that some or all individual participants are likely to experience from taking part in the research, describe them below:

Do not include benefits to society or others, and do not include subject payment (if any). Examples: medical benefits such as laboratory tests (if subjects receive the results); psychological resources made available to participants; training or education that is provided.

Previous studies with the therapeutic skills taught in the planned study support their efficacy in reducing pain interference and improving other pain-related outcomes. We anticipate based on this previous research that many of the participants will experience significant reductions in their daily pain interference and other benefits associated with the treatment.

In our past research, many members have expressed satisfaction from receiving treatment in a caring and nonjudgmental environment. Thus, participants in treatment will take away from the study new skills and knowledge regarding chronic pain and how to manage it, and – given previous results of RCTs for psychosocial interventions for chronic pain – should experience some degree of relief from pain and suffering and increases in their quality of life.

10.10 Individual subjects findings.

a. Do you anticipate that the research will produce any urgent, clinically actionable results?

These may be results from screening procedures, results that are actively sought for purposes of the study or they may be results that are discovered unintentionally. Examples include high calcium levels, liver function test results, and a mass on an MRI that may indicate a tumor, a diagnostic discrepancy, and suicidal intentions.

- [x] **No**
- [ ] **Yes** → If yes, the results should be shared with the subject(s). Complete and upload the **SUPPLEMENT: Participant Results Sharing** to the **Supporting Documents** SmartForm of ***Zipline***

b. Do you plan to share any other results of your study procedures or findings with the subjects – such as genetic test results, laboratory tests, etc.?

You should answer YES if your consent form says anything about sharing individual information with subjects.

- [ ] **No**
- [ ] **Yes** → If yes, complete and upload the **SUPPLEMENT: Participant Results Sharing** to the **Supporting Documents** SmartForm of ***Zipline***

10.11 Commercial products or patents. Is it possible that a commercial product or patent could result from this study?

[x] **No**

[ ] **Yes** → If yes, describe whether subjects might receive any remuneration/compensation and, if yes, how the amount will be determined.

11 ECONOMIC BURDEN TO PARTICIPANTS

11.1 Financial responsibility for research-related injuries. Answer this question only if the lead researcher is not a UW student, staff member, or faculty member whose primary paid appointment is at the UW.

Describe who will be financially responsible for research-related injuries experienced by subjects, and any limitations. Describe the process (if any) by which participants may obtain treatment/compensation.

11.2 Costs to subjects. Describe any research-related costs for which subjects and/or their health insurance may be responsible (examples might include: CT scan required for research eligibility screening; co-pays; surgical costs when a subject is randomized to a specific procedure; cost of a device; travel and parking expenses that will not be reimbursed).

Because this study requires completion of treatment via telephone it is possible that there is usage of minutes if participant is using a smartphone. Furthermore, if a participant indicates they want text reminders and don't have unlimited texting plans there is a possibility they could be charged messaging fees.

11.3 Reimbursement for costs. Describe any costs to subjects that will be reimbursed (such as travel expenses).

None. Researchers are not responsible for any messaging or data charges incurred by participants. If the participant is unable to access the online treatment sessions because of a temporary issue such as a broken smartphone, tablet, computer, or other software or hardware issues, researchers will not be responsible for any costs incurred by participants to fix any of this technology.

12 RESOURCES

12.1 Faculty Advisor. (For researchers who are students, fellows, or post-docs.) Provide the following information about your faculty advisor.

- Advisor's name
- Your relationship with your advisor (for example: graduate advisor; course instructor)
- Your plans for communication/consultation with your advisor about progress, problems, and changes.

n/a

12.2 Study team communication. Describe how you will ensure that each study team member is adequately trained and informed about the research procedures and requirements (including any changes) as well as their research-related duties and functions.

☐ **There is no study team.**

Dr. Ehde will oversee training of all study team members on the procedures and changes. All study team members are strongly encouraged to read both the sponsor grant proposal, the study protocol, and this IRB application (after it has been approved) before commencing any study-related activities.

Changes to the project (i.e., modifications) will be informed to the study team by email, with specific instructions and links to any new/modified materials. We will also keep a document of changes approved through modification as well as a list of the most up-to-date materials that staff may review for their information. Old materials are archived (both in hard form and electronically) and all documents are labeled with version number and approval date.
The study team will also meet regularly, at least once/week, to review recruitment/enrollment/retention reports, problem-solve any issues that arise, and discuss other study procedures. Dr. Ehde, the PI, will lead these meetings and provide ongoing training and supervision of staff in the study and human subjects research as needed. Our research lab also offers research staff professional development training in the conduct of research and encourages use of ITHS resources, both web-based and workshops.

13 OTHER APPROVALS, PERMISSIONS, and REGULATORY ISSUES

13.1 Other regulatory approvals. Identify any other regulatory approvals that are required for this research, by checking applicable boxes

Do not attach the approvals unless requested by the IRB.

Approval	Research for which this is required
☐ Radiation Safety	Procedures involving the use of radioactive materials or an ionizing radiation producing machine radiation, if they are conducted for research rather than clinical purposes. Approvals need to be attached to the Supporting Documents page in ***Zipline***.
☐ Institutional Biosafety	Procedures involving the transfer/administration of recombinant DNA, DNA/RNA derived from recombinant DNA, or synthetic DNA.
☐ RDRC	Procedures involving a radioactive drug or biological product that is not approved by the FDA for the research purpose and that is being used without an IND, for basic science research (not to determine safety and effectiveness, or for immediate therapeutic or diagnostic purposes).
☐ ESCRO	Procedures involving the use of some types of human embryonic stem cells.

13.2 Approvals and permissions. Identify any other approvals or permissions that will be obtained. For example: from a school, external site/organization, funding agency, employee union, UW Medicine clinical unit.

Do not attach the approvals and permissions unless requested by the IRB.

n/a

13.3 Financial Conflict of Interest. Does any member of the team have ownership or other Significant Financial Interest (SFI) with this research as defined by UW policy GIM 10?

- [x] **No**
- [ ] **Yes** → If yes, has the Office of Research made a determination regarding this SFI as it pertains to your proposed research?
  - [ ] **No** → If no, contact the Office of Research (206.616.0804, research@uw.edu) for guidance on how to obtain the determination
  - [ ] **Yes** → If yes, upload the Conflict Management Plan for every team member who has a FCOI with respect to the research, to the **Supporting Documents** page of ***Zipline***. If it is not yet available, use the text box to describe whether the Significant Financial Interest has been disclosed already to the UW Office of Research and include the FIDS Disclosure ID if available.