



INFORMED CONSENT DOCUMENT

Project Title: Behavioral Activation and Medication Optimization For Improving Perioperative Mental Health In Older Adults Undergoing Orthopedic Surgery

Principal Investigator: Ryan P. Calfee MD, MSc

Research Team Contact: Theresa Cordner 314-273-7921

This consent form describes the research study and helps you decide if you want to participate. It provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights and responsibilities as a research participant.

KEY INFORMATION

- This is a research study conducted by Dr. Ryan Calfee about improving outcomes for older adult surgical patients. The study is testing a surgical wellness program designed to improve mental, emotional, and cognitive health. Because the time around surgery can be stressful, we are studying ways to reduce stress and improve mood.
- If you choose to take part in the study, there is a 50/50 chance you will be asked to participate in the Surgical Wellness Program. You will be randomly assigned, like a coin flip, to either the Standard Care group or the Surgical Wellness Program group.
 - Standard Care means continuing the usual care from your provider. We will give you a list of resources, if you want to explore them on your own, but you will not receive therapy as part of the study. In either group, you will be in the study for about 3 months after surgery.
- The Surgical Wellness Program includes behavior therapy at no cost to you. You will be provided a specialized counselor called a Perioperative Wellness Partner who will work with you in sessions by phone or zoom. The sessions are patient-driven, scheduled at times that work for you, and continue for up to 3 months after your surgery. During these sessions, your Wellness Partner will support you in engaging in activities to improve your mood. The study team will review your medications with you and discuss any recommendations that may:
 - improve mood
 - reduce risks of post-operative delirium, falls, and rehospitalizations.
- The main risks of being in this study are:
 - The surgical wellness team may make recommendations to your primary care team concerning your medications or treatment plan.
 - Behavioral interventions for depression or anxiety have the potential to worsen the symptoms of depression or anxiety.
- You should carefully consider the information in this consent document and discuss it with the research team. You should understand why you might want to participate, or why you might not

want to participate. You may choose to participate or not. Instead of being in this study, you could receive mental health care through a provider of your choosing and consult with your provider about your prescriptions.

- If you agree and sign this consent, you will be volunteering to participate in the research study. As a voluntary participant, whether you are assigned to the Surgical Wellness Program group or the Standard Care group, you will be asked to complete surveys 4 times over approximately 3 months. You will not be asked to make additional visits to campus for the study.
- You may or may not benefit from volunteering, whether you participate in the Surgical Wellness Program group, or receive the Standard Care, with no study-related therapy. Additionally, by volunteering you may help someone else in the future, as the study data will contribute to future studies with aims of improvements in perioperative care.
- There is no cost to you for participating, and you will be paid up to a total of \$100 for being a volunteer participant. All of this information will be explained in more detail in this consent document. The research team must give you a copy of this signed consent document.

The rest of this document provides more details about the study.

WHAT IS THE PURPOSE OF THIS STUDY?

We invite you to participate in this research study because you are age 60 or older, scheduled for a major orthopedic procedure, and have some symptoms common in stressful times, like depression or anxiety.

The purpose of this research study is to test the effectiveness of a pre- and post-surgical program of personalized medication optimization and behavioral therapy to improve mental health for older orthopedic surgery patients with symptoms of depression and/or anxiety.

WHAT WILL HAPPEN DURING THIS STUDY?

As part of the process to determine eligibility, if you agree to take part in the screening questions, a research team member will contact you to complete a brief survey about your feelings and current mood, then a short cognitive assessment where you will be asked a series of memory and brain health items. These questions will take approximately 15 minutes to complete.

If it is determined that you are eligible to participate, and you consent, then you will be asked to complete a set of baseline questionnaires. These include questions about your:

- demographics
- physical health
- quality of life
- brain health
- memory
- mental health.

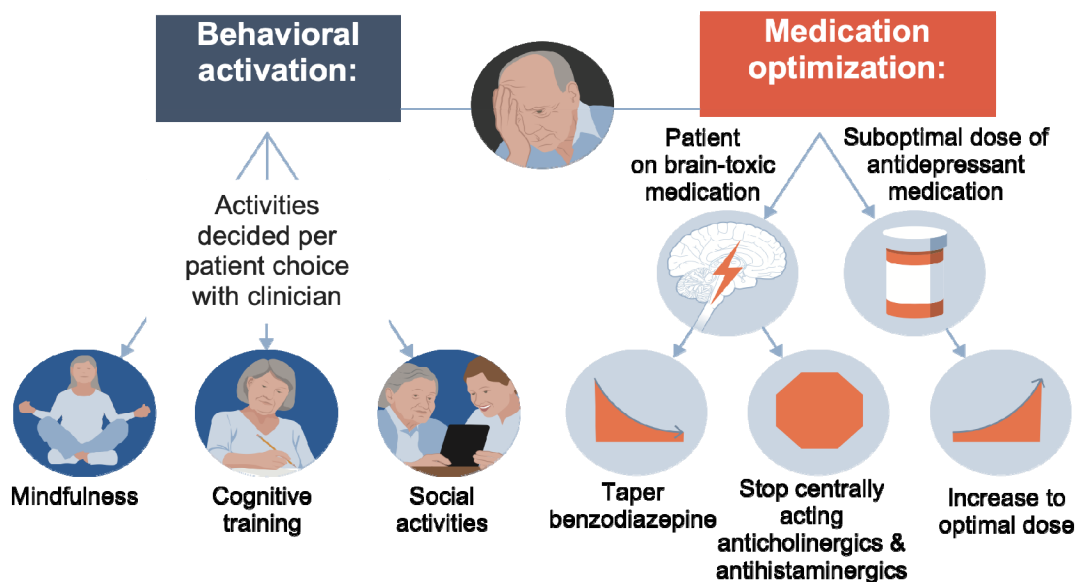
These will be delivered remotely via a web-based survey or by phone or postal mail.

Here is an outline of what the study should look like for you:

- The baseline questionnaires will take approximately 20 minutes to complete.
- Following your baseline surveys, at approximately 1 month, and 3 months after surgery, you will be asked to complete another set of questionnaires, taking approximately 20 minutes to complete.
- After the final 3 month follow-up, we may invite you to participate in a short phone interview, asking about your experience in the study.
- For all questionnaires and study visits, you are free to skip any questions that you would prefer not to answer for any reason.

After baseline and before your scheduled surgery, you will be randomly assigned to receive one of the two study treatments; either standard care or the surgical wellness program. This means that the study treatment you receive will be determined purely by chance, like flipping a coin. You will have a 50/50 chance of receiving either of the study treatments.

The research coordinators and other study team members will not know which group you are in.



Surgical Wellness Program:

For those in the Surgical Wellness Program group, your Perioperative Wellness Partner will contact you by phone to discuss the program and arrange your first session. The Perioperative Wellness Partner is a specially trained therapist on the study team and will work with you using a therapeutic technique called behavioral activation. This will be called your “wellness program” during the study. The program will begin before your surgery if possible.

Your Perioperative Wellness Partner will support you during the surgical period to slowly return to the everyday activities that are important to you and do activities that have been shown to improve mood. You will work with your Perioperative Wellness Partner to choose activities that are the most helpful to you. You should check with your physicians if there is any question about the safety of any physical activities that are included in your behavioral activation plan.

Wellness program sessions will occur by phone or Zoom. They will begin before your surgery, with sessions approximately weekly, by your preference. If your hospital stay allows, your Perioperative Wellness Partner will ask if you would like a friendly check in visit while you are in the hospital. After you are discharged, wellness program sessions will continue, approximately once every one to two weeks, up to 3 months after your surgery.

The surgical wellness program includes a review of your medications by our pharmacy team. This process is called medication optimization and the purpose is to make sure all your medications support your mental health without leading to increased risks during the surgical period. The pharmacy team will discuss with you and your physician any potential changes to your medications, which may include adjusting the dose, frequency, or discontinuing a medication.

In addition to the surveys you will be invited to complete at baseline, 1 month, and 3 month follow-up, plus the phone interview after your 3 month follow up, we will invite you to complete a brief survey at approximately 2 months after surgery. This survey can be completed online if you prefer, or by phone, and it will take about 10 minutes. These questions are about your participation in the wellness program, and about your mood and your health, both physical and mental. There is no additional compensation for this brief survey, but as with all questionnaires and study visits, you are free to skip any questions that you would prefer not to answer for any reason.

For all study patients in both groups:

After your surgery, we will review your medical record for any signs of confusion or change in mental status in the first few days after surgery. We may access your medical record throughout your participation as well as after your participation has ended to verify your completed surveys and to follow-up when you have had any medical complications following your surgery. We will only access information relevant to the time period of your participation, from enrollment up to approximately three months after surgery.

Your medical record contains private, protected health information, which is information that can personally identify you. Specifically, we will access/use information such as your name, date of birth, and diagnosis, information relevant to your participation in this study before, during and after your

surgery including dates, medications, notes, details about your procedure and your health and mental status after surgery. The research team only collects existing medical information and will not create or add any information to your medical record.

Will you save my research information data to use in future research studies?

The data we are obtaining in this study may be made available for studies going on right now as well as studies that are conducted in the future.

These studies may be done by researchers at Washington University, other research centers and institutions, or private companies involved in research.

We may also share your research data with large data repositories (a repository is a database of information) for use by others, such as the research community, institutions, private companies and the general public. If your individual research data is placed in one of these repositories, your name and other identifying information will be removed. All reasonable precautions will be taken to protect your privacy and confidentiality. Necessary approvals will be obtained to use the data. Certain summary information may be available to the general public.

These future studies may provide additional information that will be helpful in understanding persistent pain, or other diseases or conditions, including research to develop investigational tests, treatments, drugs or devices that are not yet approved by the U.S. Food and Drug Administration. Should this occur, there are no plans to provide financial compensation to you. There are no plans to provide financial compensation to you should use of your data occur. It is unlikely that what we learn from these studies will have a direct benefit to you. By allowing us to use your data you give up any property rights you may have in the data. We will protect the confidentiality of your information to the extent possible. If you change your mind and do not want us to store and use your data for future research you should contact the research team member identified at the top of this document. The data will no longer be used for research purposes. However, if some research with your data has already been completed, the information from that research may still be used. Also, if the data has been shared with other researchers it might not be possible to withdraw the data to the extent it has been shared.

It is your choice whether or not to let researchers share your data for research in the future. If you say “yes,” you can change your mind later. If you say “no,” you can still fully participate in this study.

Please write your initials next to your choice:

_____ **Yes, use my data in other research studies.**
Initials

_____ **No, do NOT use my data in other research studies.**
Initials

Audio /Video Recording

If you are assigned to the Surgical Wellness Program group, one aspect of this study involves making audio recordings and or zoom recordings of your surgical wellness program sessions. These recordings will routinely be made during visits (by phone, in-person, or by Zoom if you prefer) with your Perioperative Wellness Partner so that they can later be reviewed by members of the study team. If you prefer to meet for your sessions by Zoom, then the recordings could also include video, if you agree to

that. If you agree, we would also like to audio record the brief interview after the last study visit. The purpose of the recordings is for tracking quality and consistency of the surgical wellness program as well as making adaptations to the program. The recordings will be destroyed at the conclusion of the study. You can still be in the study without being recorded.

Do you agree to Audio/Video recording of study visits and interview?

<u> </u> Yes	<u> </u> No
Initials	Initials

If you agree to Audio Recording, we would also like to use these recordings to train a computer program that will learn behavioral patterns from voice data. This will help us build a smart tool that can identify surgical patients who may need preventive health interventions in the future. This voice data will be shared with researchers at the University of Health Sciences and Pharmacy (UHSP) in St. Louis, if you agree to this optional aspect of the study. You can still be in our Wellness Program study without participating in this additional voice data project.

Do you agree to share Audio data (coded with study ID) with researchers at UHSP?

<u> </u> Yes	<u> </u> No
Initials	Initials

HOW MANY PEOPLE WILL PARTICIPATE?

Up to 150 people will take part in this study conducted by investigators at Washington University.

HOW LONG WILL I BE IN THIS STUDY?

If you agree to take part in this study, your involvement will last for approximately 4 months. The research team may review medical records during this period, and after your active participation has ended, up to 2 years after the study is closed to enrollment.

WHAT ARE THE RISKS OF THIS STUDY?

You may experience one or more of the risks indicated below from being in this study. In addition to these, there may be other unknown risks, or risks that we did not anticipate, associated with being in this study.

The surgical wellness team may make recommendations to your primary care team concerning your medications or treatment plan.

- Behavioral interventions for depression or anxiety have the potential to worsen the symptoms of depression or anxiety.

It is possible that answering the test questions may make you uncomfortable. You are free to not answer any of the questions that we will ask you for any reason.

A risk of participating in this study is that confidential information about you may be accidentally disclosed. We will use our best efforts to keep the information about you secure. Please see the section in this consent form titled “*How will you keep my information confidential?*” for more information.

WHAT ARE THE BENEFITS OF THIS STUDY?

You may or may not benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because it will help us improve care of depression and anxiety in older adults undergoing surgery.

WHAT OTHER TREATMENT OPTIONS ARE THERE?

Before you decide whether to be in this study, your doctor will discuss the other options that are available to you. Instead of being in this study, you could receive mental health care through a provider of your choosing and consult with your provider about your prescriptions.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any additional costs for being in this research study.

You and/or your medical/hospital insurance provider will remain responsible for your regular medical care expenses.

WILL I BE PAID FOR PARTICIPATING?

You will be paid for being in this research study. You will be asked to provide your social security number (SSN). You may also need to provide your address if payment will be mailed to you. You will receive payment in the form of a reloadable debit card. We will provide you with information about any fees or restrictions on the use of the debit card.

Compensation is \$25 for data collection visits at Baseline, 1 month, and 3 months.

- For patients in the Standard Care group, this is up to a total of \$75 if all data visits are completed.
- Patients in the Wellness Program group, you may also be contacted at approximately 2 months for a brief survey (5-10 minutes) for which there is no compensation, but for the post-End of Study data surveys and semi-structured interview, there is an additional \$25, for up to a total of \$100 if all data visits are completed.
- Here is the payment schedule:

Baseline - survey/interview <i>both groups</i>	\$25
Month 1 – survey/interview <i>both groups</i>	\$25
Month 2 – brief survey <i>Wellness Program group only</i>	\$ 0
Month 3 – survey/interview <i>both groups</i>	\$25
End of Study – survey/interview	

Wellness Program group only	\$25
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We will give you instructions with the card and a reminder to keep it throughout participation, as more funds will be added to it after each data collection visit.

WHO IS FUNDING THIS STUDY?

The National Institute of Mental Health (NIMH) is funding this research study. This means that Washington University is receiving payments from NIMH to support the activities that are required to conduct the study. No one on the research team will receive a direct payment or increase in salary from NIMH for conducting this study.

WHAT IF I AM INJURED AS A RESULT OF THIS STUDY?

Washington University investigators and staff will try to reduce, control, and treat any complications from this research. If you feel you are injured because of the study, please contact Katie Holzer, 314-273-8841 or Theresa Cordner at 314-273-7921 and/or the Human Research Protection Office at 1-(800)-438-0445.

Decisions about whether payment for medical treatment for injuries relating to your participation in research will be made by Washington University. If you need to seek medical care for a research-related injury, please notify the investigator as soon as possible.

HOW WILL YOU KEEP MY INFORMATION CONFIDENTIAL?

Other people such as those indicated below may become aware of your participation in this study and may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you.

- Government representatives, (including the Office for Human Research Protections) to complete federal or state responsibilities
- The U.S. Food and Drug Administration
- National Institute of Mental Health (NIMH) may also inspect any part of your medical record for the purposes of auditing the conduct of the study
- University of Health Sciences and Pharmacy in St. Louis
- Hospital or University representatives, to complete Hospital or University responsibilities
- Information about your participation in this study may be documented in your health care records and be available to your health care providers who are not part of the research team.
- The last four digits of your social security number may be used in hospital or University systems to track billing information for research procedures
- Washington University's Institutional Review Board (a committee that oversees the conduct of research involving human participants) and the Human Research Protection Office. The Institutional Review Board has reviewed and approved this study.

To help protect your confidentiality, we will code your completed surveys and computerized tests with a unique ID. All electronic data will be hosted on a password-protected, firewall-secured server that is only accessible to the research team through password-protected departmental computers.

Any report or article that we write will not include information that can directly identify you. The

journals that publish these reports or articles require that we share your information that was collected for this study with others. Sharing this information will allow others to make sure the results of this study are correct and help develop new ideas for research. Your information will be shared in a way that cannot directly identify you.

During and after the study, we will send data provided by you to the National Institute of Health (NIH) and their associated data repositories. However, before we send it, we will remove all identifying information, and replace that information with the Global Unique Identifier. The Global Unique Identifier (GUID) is created using the GUID form, which provides us with key information needed by the NIH to link data to a specific research participant without exposing or transferring their protected health information (PHI). Your PHI will not be shared with the NIH's associated data repositories. Other researchers nationwide can then file an application with the NIH to obtain access to your de-identified study data for research purposes. Experts at the NIH who are responsible for protecting this health and science information look at every request carefully to minimize risks of privacy. Researchers hope to accelerate the pace of finding answers in science and medicine by using this collaborative approach.

A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

To further protect your privacy, this research is covered by a Certificate of Confidentiality from the federal government. This means that the researchers can refuse to disclose information that may identify you in any legal or court proceeding or to anyone who is not connected with the research except if:

- there is a law that requires disclosure, such as to report child abuse and neglect, or harm to self or others;
- you give permission to disclose your information, including as described in this consent form; or
- it is used for other scientific research allowed by federal law.

This Certificate may not be effective for information held in foreign countries.

You have the right to share your information or involvement in this study with anyone at any time. You may also give the research team permission to disclose your information to a third party or any other person not connected with the research.

Information about your participation in this study may be documented in your health care records and will be available to anyone with access to your health care record. This information may also be released as part of a release of information request.

Are there additional protections for my health information?

Protected Health Information (PHI) is health information that identifies you. PHI is protected by federal law under HIPAA (the Health Insurance Portability and Accountability Act). To take part in this research, you must give the research team permission to use and disclose (share) your PHI for the study as explained in this consent form. The research team will follow state and federal laws and may share your health information with the agencies and people listed under the previous section titled, "How will you keep my information confidential?"

Once your health information is shared with someone outside of the research team, it may no longer be protected by HIPAA.

The research team will only use and share your information as talked about in this form or as permitted or required by law. When possible, the research team will make sure information cannot be linked to you (de-identified). Once information is de-identified, it may be used and shared for other purposes not discussed in this consent form. If you have questions or concerns about your privacy and the use of your PHI, please contact the University's Privacy Officer at 866-747-4975.

Although you will not be allowed to see the study information, you may be given access to your health care records by contacting your health care provider.

If you decide not to sign this form, it will not affect:

- your treatment or the care given by your health provider.
- your insurance payment or enrollment in any health plans.
- any benefits to which you are entitled.

However, it will not be possible for you to take part in the study.

If you sign this form:

- You authorize the use of your PHI for this research
- This authorization does not expire.
- You may later change your mind and not let the research team use or share your information (you may revoke your authorization).
- To revoke your authorization, complete the withdrawal letter found in the Participant section of the Human Research Protection Office website at hrpo.wustl.edu or you may request that the investigator send you a copy of the letter.
 - **If you revoke your authorization:**
 - The research team may only use and share information already collected for the study.
 - Your information may still be used and shared as necessary to maintain the integrity of the research, for example, to account for a participant's withdrawal from the research study or for safety reasons.
 - You will not be allowed to continue to participate in the study.

Can we contact you by email and/or text?

We would like to contact you by email or text messages for the purposes listed below. Some of these messages may contain health information that identifies you.

- to send you the survey links so you can complete the consent form and/or surveys online
- to send you reminders to complete computerized surveys
- to coordinate Wellness Program sessions via phone or zoom
- to share Wellness Program materials and reminders

Only the research team will have access to your email or text communications. We will only communicate by email or text to send you the information listed above. If you have any questions or need to contact us for an urgent or emergent situation, please contact the research team member

identified at the top of this document.

You should be aware that there are risks associated with sending your health information via email or text messaging.

- Text messaging is not a secure communication method.
- There is always a risk that the message could be intercepted or sent to the wrong email address or phone number. To avoid sending messages to the wrong email address, the first email we send you will be a test message to ensure we have the correct email address.
- When using any computer, you should be careful to protect your username and password. Make sure you log-out before getting up from the computer.
- If you share a home computer with other family members, and do not want them to know you are participating in this study make sure you provide an email address that only you can access.
- Your employer will have access to any email communications sent or received on any electronic devices used for work or through a work server.
- If you lose your phone, others may be able to access the messages that we send.

Do you agree to allow us to send your health information via email?

 Yes **No**
Initials **Initials**

Do you agree to allow us to send your health information via text message?

 Yes **No**
Initials **Initials**

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose not to take part at all. If you decide to be in this study, you may stop participating at any time. Any data that was collected as part of your participation in the study will remain as part of the study records and cannot be removed.

If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify.

What if I decide to withdraw from the study?

You may withdraw by telling the study team you are no longer interested in participating in the study or you may send in a withdrawal letter. A sample withdrawal letter can be found in the Participant section of the Human Research Protection Office website at hrpo.wustl.edu.

If you withdraw, you may be invited to participate in an optional brief survey on participation and non-participation. The goal of this is to help us learn about barriers to research and if we can improve the process or increase accessibility in the future.

Will I receive new information about the study while participating?

If we obtain any new information during this study that might affect your willingness to continue participating in the study, we'll promptly provide you with that information.

Can someone else end my participation in this study?

Under certain circumstances, the investigator might decide to end your participation in this research study earlier than planned. This might happen for no reason or because funding for the research study has ended.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Katie Holzer, 314-273-3385 or Theresa Cordner, 314-273-7921. If you experience a research-related injury, please contact: Katie Holzer, 314-273-3385.

If you have questions, concerns, or complaints about your rights as a research participant, please contact the Human Research Protection Office 1-(800)-438-0445, or email hrpo@wustl.edu. General information about being a research participant can be found on the Human Research Protection Office web site, hrpo.wustl.edu. To offer input about your experiences as a research participant or to speak to someone other than the research staff, call the Human Research Protection Office at the number above.

This consent form is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by agreeing to participate in this study. As a participant you have rights and responsibilities as described in this document and including:

- To be given enough time before signing below to weigh the risks and potential benefits and decide if you want to participate without any pressure from the research team or others.
- To understand all of the information included in the document, have your questions answered, and receive an explanation of anything you do not understand.
- To follow the procedures described in this document and the instructions of the research team to the best of your ability unless you choose to stop your participation in the research study.
- To give the research team accurate and complete information.
- To tell the research team promptly about any problems you have related to your participation, or if you are unable to continue and wish to stop participating in the research study.

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a signed and dated copy of this form.

Do not sign this form if today's date is after EXPIRATION DATE: 10/15/26.

(Signature of Participant)

(Date)

(Participant's name – printed)

Statement of Person Who Obtained Consent

The information in this document has been discussed with the participant or, where appropriate, with the participant's legally authorized representative. The participant has indicated that they understand the risks, benefits, and procedures involved with participation in this research study.

(Signature of Person who Obtained Consent)

(Date)

(Name of Person who Obtained Consent - printed)