



THE SECOND TRIAL

TOOLKIT INTRO

Surgical Education Culture Optimization
through targeted interventions based on
National comparative Data (SECOND) Trial

TOOLKIT INTRODUCTION

Welcome to the SECOND Trial Toolkit! We are eager to share the collection of interventions, resources, and expert advice we have gathered to help programs across the country address their residents' well-being and learning environment.

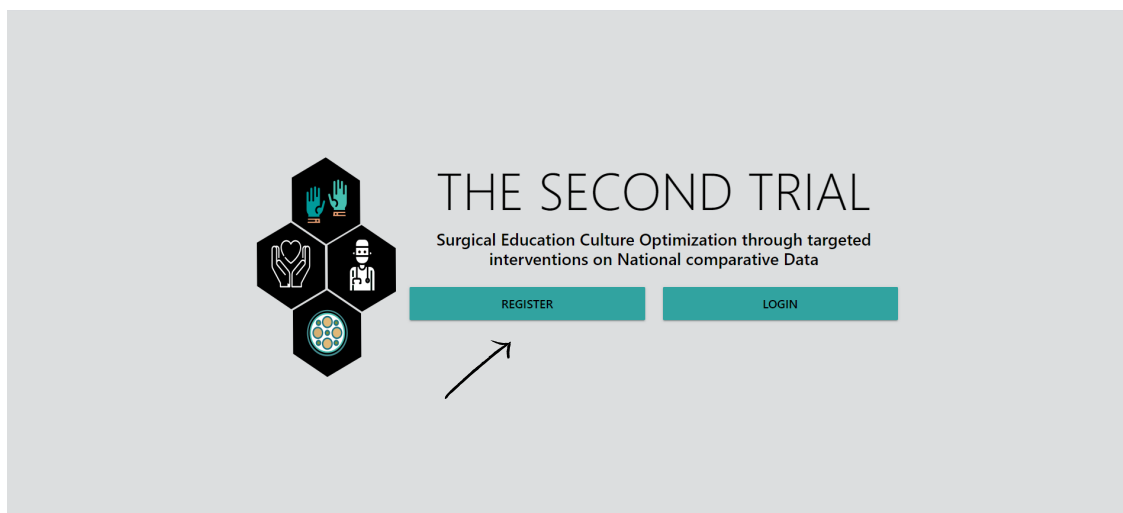
In this booklet, you will find general instructions on how to use the toolkit. The toolkit website was designed to be interactive and user-friendly. We encourage you to play around and explore! This document provides a general overview to get you started.

If you experience any technical difficulties, please reach out to second@northwestern.edu.

Step 1. Register for an account

Usernames and passwords have been generated for every program director and coordinator only. Once you log-in, you will be prompted to change your password and complete additional registration information.

If you did not receive a username or password from us and would like one, please go to toolkit.thesecondtrial.org and register for an account. We will then review and approve your request. You will be sent an email notification when your account is active.



We ask that you keep the Toolkit access strictly within your institution so that we may maintain the integrity of the study. You may share content with others within your institution.

Register

Email

First Name

Last Name

Program Name

ACGME Number (optional)

[LOOKUP MY ACGME NUMBER](#)

Choose the role that best describes you:

Note: Password must include one lowercase letter, one uppercase letter, one number and a non-alphanumeric character

Password

Confirm password

[REGISTER](#)

Step 2. Log-in to your account

To log-in, use your email and password.

Login

Email

The Email field is required.

Password

[LOGIN](#)

Step 3. Explore the Wellness Toolkit!

Once you log-in to your account, you will automatically land on the Toolkit page. The Wellness Toolkit is organized according to our conceptual model, which was adapted from prior work [1, 2]. As with the data in your Resident Well-Being and Learning Environment Report, interventions are classified into different learning environment domains. Each intervention may fall within multiple domains. Of note, the Toolkit has more domains than the 2019 Report. Additional items from your 2020 Report will align with these newer domains (e.g., Work-Life Balance). Interventions that target individual skill building may be found within their associated learning environment domains, as well as within the Individual Mediating Factors section.

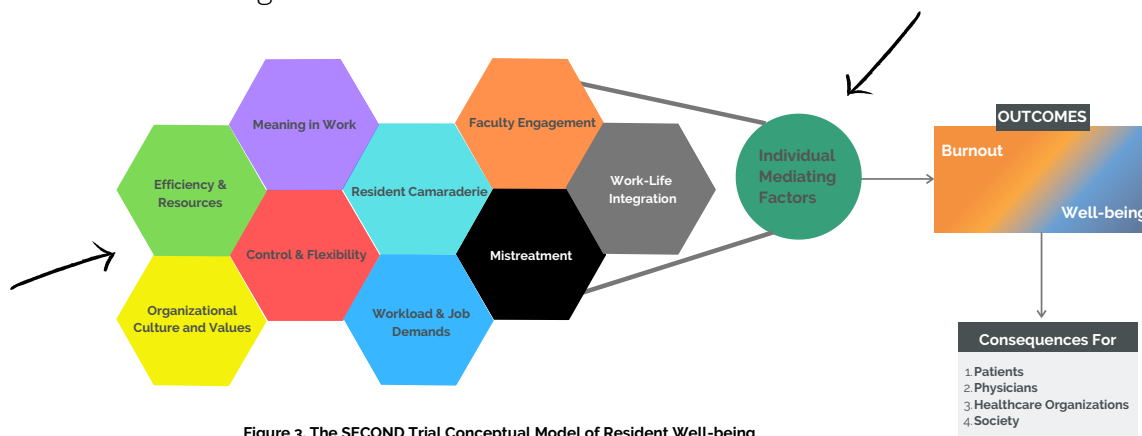
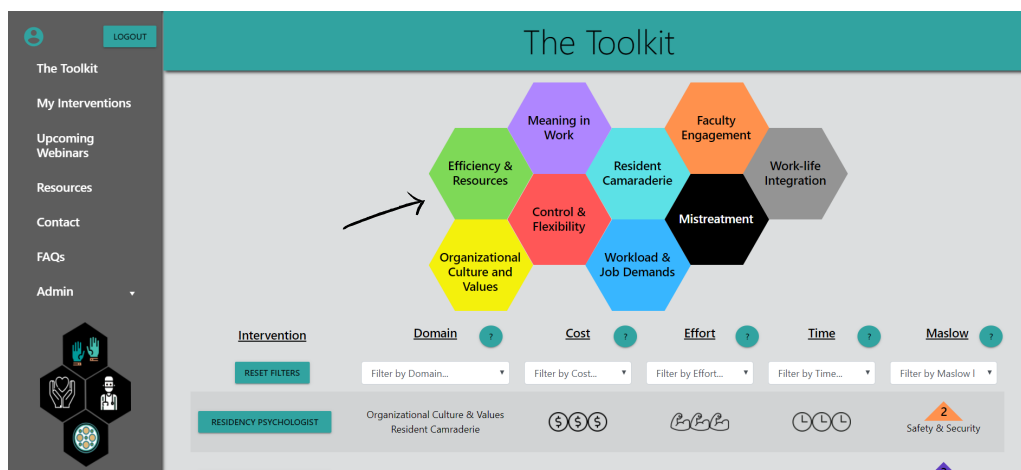





Figure 3. The SECOND Trial Conceptual Model of Resident Well-being

Searching interventions

We have designed the website so that you may search for interventions in different ways.

You may click on each **Learning Environment Domain** to see all available interventions within it:



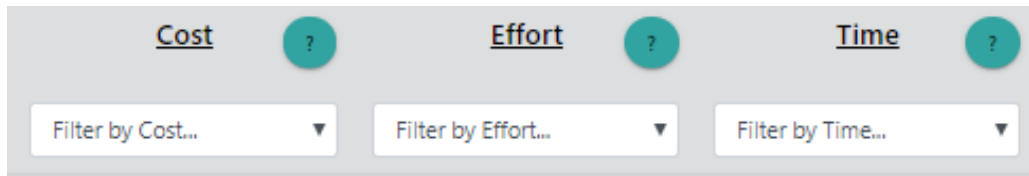
DOMAIN	DEFINITION
 <p>Efficiency & Resources</p>	<p>In addition to caring for the sickest, most complex patients in U.S. healthcare, surgical residents must master an ever-expanding set of clinical and operative skills necessary to function as stand-alone surgeons, while simultaneously inundated with administrative tasks. Between progress notes and discharge summaries, coding queries and insurance battles, lab draws and patient transport, surgical residents may find themselves with little time for their primary goals: patient care and education. The domain of Efficiency and Resources considers the resources that impact residents' ability to function at the highest level, including use of effective support staff, meaningful protection of didactic time, and the adequacy of space, computers, and other materials that allow for timely completion of work.</p>
 <p>Meaning in Work</p>	<p>Finding meaning in work is critical for wellness in any career. However, surgical residents face unique challenges in this domain. For example, maintaining passion may be difficult for surgical residents as our training is among the longest in medicine, with some spending upwards of 10 years as trainees. Given our tradition of hierarchy, junior residents may be particularly at risk for losing meaning, as they have the least operative time, the most taskwork, and often the least input in decision-making. Even senior residents may grow disillusioned without clinical or operative autonomy. Additionally, surgical residents are often on the front lines of caring for sick patients, which may lead to emotional exhaustion and compassion fatigue.</p>
 <p>Organizational Culture & Values</p>	<p>Surgical resident well-being is profoundly impacted by the values of the training environment; the ability of any initiative to impact individual wellness is influenced by whether the idea is supported by the culture of the program. This domain also considers program response to resident errors, as well as how programs deal with issues of fairness. Furthermore, this domain evaluates surgical training program commitment to values such as diversity, altruism, professionalism, and leadership.</p>
 <p>Control & Flexibility</p>	<p>Resident autonomy and the ability to self-govern have a profound impact on the well-being of surgical residents. For example, this domain considers whether residents have meaningful input into their rotations and schedules. While no one is in disagreement that call is necessary for both patient care and education, allowing some flexibility or at least advanced notice about when that call is scheduled is a major contributor to wellness. This domain also highlights the importance of resident voice on the training experience; it evaluates if and how programs elicit feedback from their residents and whether there is an appreciable response to resident concerns.</p>

The SECOND Trial Conceptual Model of Resident Well-being Domains and Definitions

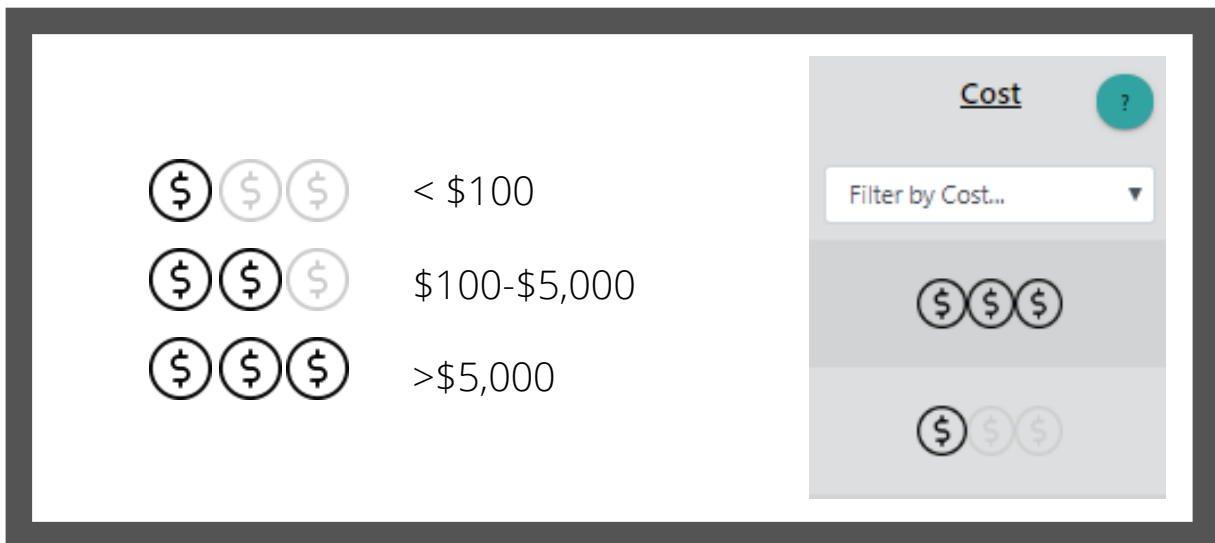
DOMAIN	DEFINITION
	<p>As surgical residents find themselves “in the trenches” together during training, collegiality between residents is an important aspect of wellness. This is a critical but complex topic, as surgical residents come from all walks of life and creating harmony and functional work relationships is not always easy or intuitive. This domain focuses on a sense of community at work, which may be influenced by resident program recruitment strategy, team structure and/or training, and both unstructured and departmentally sponsored social events. This domain also considers matters such as resident to resident cooperation, emotional support, and appreciation.</p>
	<p>The dynamic between attending surgeons and surgical residents is integral to training and therefore has great impact on resident well-being. Mentorship, for example, is immeasurably influential in the professional development and personal growth of surgical residents. This domain additionally includes appreciation of resident work by faculty, as well as the presence of faculty role models.</p>
	<p>The term “resident” was coined when trainees essentially lived within the hospitals where they worked. The installation of duty hour regulations by the Accreditation Council for Graduate Medical Education (ACGME) in the early 2000s marked a culture shift in recognizing the impact of prolonged work hours on both patient safety and resident well-being, but, for surgical residents, the pendulum continues to swing on this issue. The FIRST Trial found that surgical residents considered flexibility in duty hours regulations (e.g., the ability to extend shifts) to be better for continuity of patient care and the acquisition of necessary clinical and operative skills.[3] However, flexible duty hours can negatively impact time available for family, extracurricular activities, and rest. Consequently, workload and job demands continue to be influential aspects of overall resident well-being. This domain considers not only duty hour regulations, but also productivity expectations, team structure, and delegation of work.</p>
	<p>Our recently published study highlighted the pervasive issue of discrimination, abuse, and harassment during surgical training.[4] Not only was resident mistreatment common, with nearly 50% reporting having experienced at least one form of it, but it was also significantly associated with resident burnout and thoughts of suicide. Surgical residents are uniquely vulnerable to mistreatment due to inherent power differentials in the training structure.</p>
	<p>A recent study of retired surgeons found the most common thing they would have changed about their career was spending more time with family and taking better care of themselves. Modeling and teaching that work-life integration requires constant effort and attention is important to ensure fulfillment and therefore longevity of our our trainees' careers.</p>

The SECOND Trial Conceptual Model of Resident Well-being Domains and Definitions

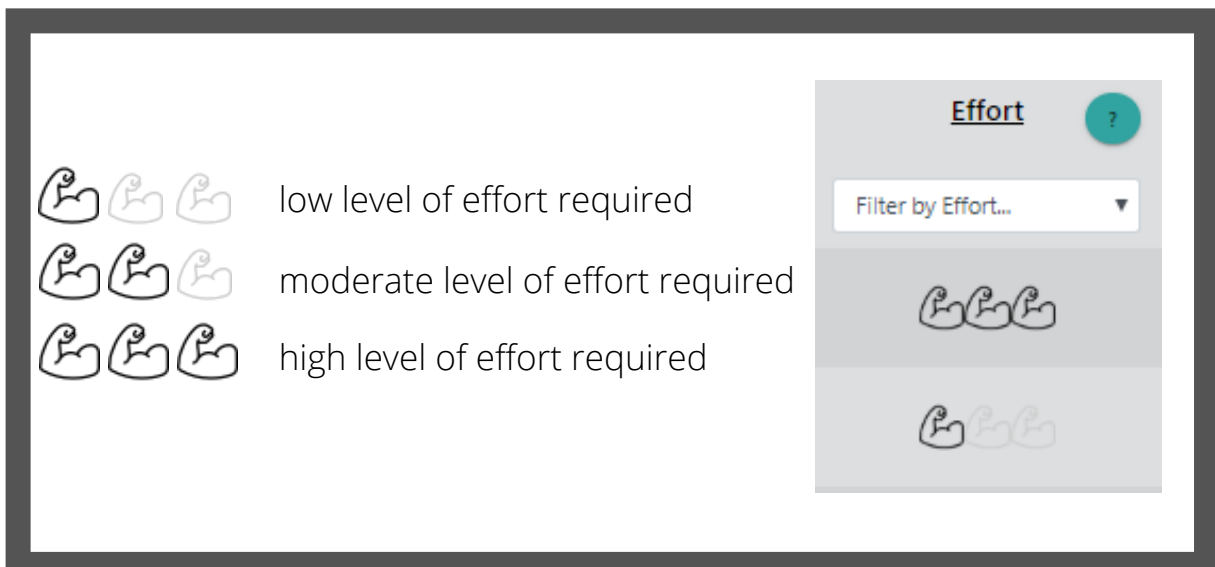
You may also filter interventions according to the following criteria to further narrow your search:



- **Cost** is estimated based upon other programs' experiences. If different programs have implemented the intervention with varying costs, the highest reported is reflected by this scale:

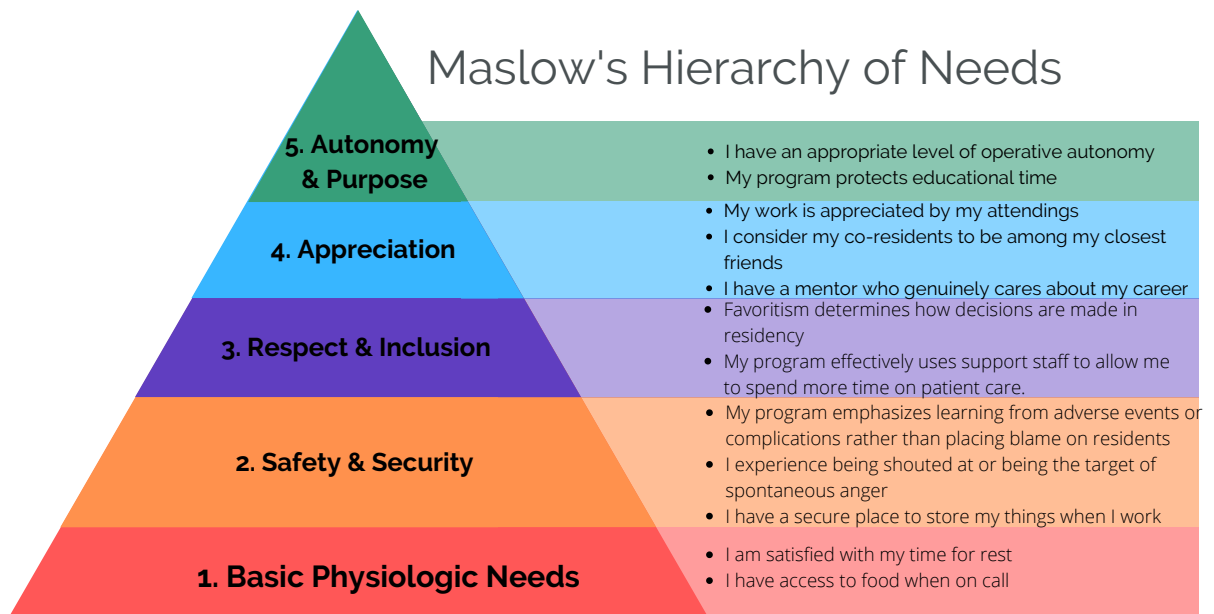


- **Effort** reflects logistical difficulty of planning and executing interventions:



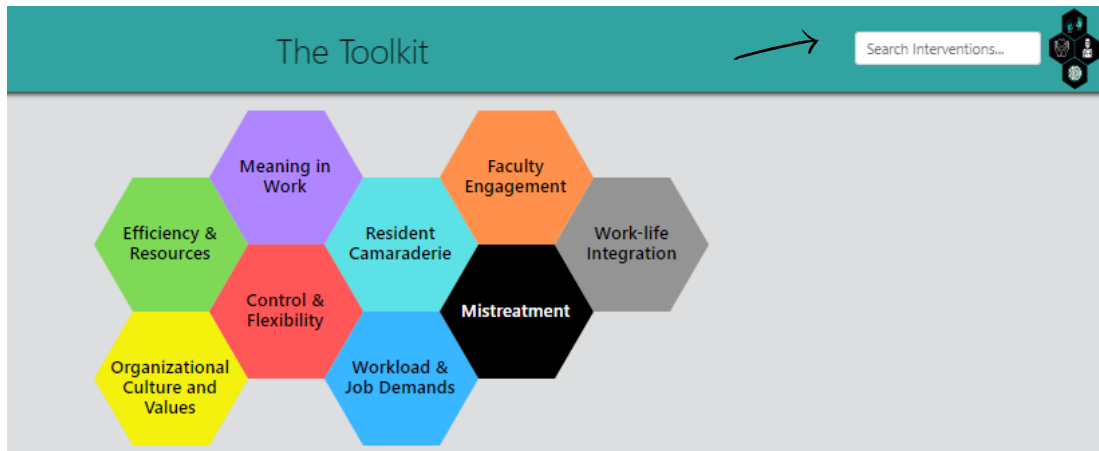
- **Time** required for successful implementation:

- **Maslow's** Hierarchy of Needs conceptualizes needs as a pyramid, with each category building upon the one below it. When choosing interventions, we recommend starting at the lowest level at which there is an unmet need. In our experience, programs that "skip" levels find their efforts fall on deaf ears:



Maslow's Hierarchy of Needs, adapted for surgical residents.

- **Search bar** you may also use our Search Interventions function by entering free-text. This functionality searches both intervention titles and content.



Organization of interventions

Each intervention is organized as follows:

What?

At the top, you will find a short to-do list of goals for the intervention.

Why?

The rationale for the intervention is presented with a brief review of the relevant background literature. Explanations of the ways in which the intervention addresses each learning environment domain are provided.

How?

Step-by-step instructions are given for each intervention. Where relevant, hyperlinks are provided. These will bring you to referenced materials, including literature citations, downloadable fill-in-the-blank policy documents, email drafts, and PowerPoint slides.

Helpful Resources for Implementation

Coaches/Successful Implementations

Content experts – often the original authors and/or early adopters of an intervention – have agreed to provide coaching on their interventions to interested programs. Most coaching will begin with an introductory webinar. Depending on the specific intervention, it may move to a one-on-one or a small group format; we will coordinate this, so please communicate with us about what you feel will help you.

Collaboration Networking/Implementation in Process

Programs who have decided to start working on the intervention are listed. We hope that all programs working on any given intervention will share barriers encountered as well as tips and tricks for overcoming them in real time. Of note, you are not automatically entered into this network by saving interventions; you must give us permission to post your institution and contact person by emailing us at SECOND@northwestern.edu

Upcoming Opportunities

Upcoming webinars, coaching conference calls, etc are listed here.

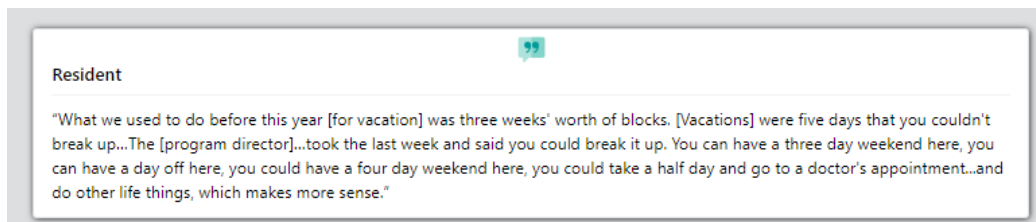
References

Links are provided to either journal websites or PubMed. Due to copyright issues, we cannot post the PDFs on our website, but please let us know at SECOND@northwestern.edu if you have trouble accessing any of these files at your institution; we will help you.

Recordings of past webinars will be also posted here.

Quotes

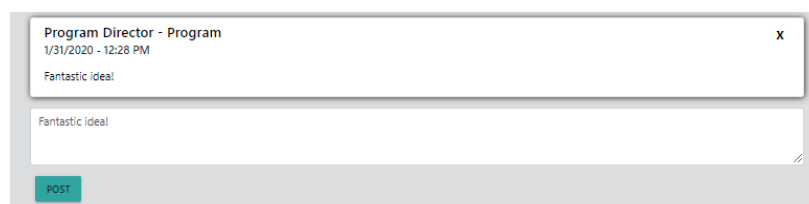
Quotes illustrating the impact of the intervention at other institutions (obtained from the qualitative data we collected during the SECOND Trial Program Tours) are posted here.



Comments

This Toolkit is a collaborative work that brings together ideas from our surgical education community across the country. We intend for it to be interactive and iterative. We hope you use this section to interact with the content expert/coach, the coordinating team (us), and each other. Feel free to post questions, feedback, and/or tips for your colleagues!

Interventions are added on a rolling basis. We will send a monthly email newsletter to all intervention programs listing newly posted interventions, updates to existing interventions, and upcoming webinars/events.



Save your favorite interventions to "My Interventions"

My Interventions

As you browse the Toolkit, save the interventions that interest you to My Interventions.

Flexible Vacation Policy

BACK TO MY INTERVENTIONS

Allowing residents to exchange week-long vacations for shorter vacations that are schedules with less notice.

Add to My Interventions
NO YES

Cost
\$ \$ \$

Effort
👉 👉 👉

Time
🕒 🕒 🕒

Maslow
3
Respect & Inclusion

Domain
Control & Flexibility
Organizational Culture & Values

When you go to your My Interventions page, you will see:

- (1) Webinars for My Interventions: a list of all the relevant webinars/events for all of your saved interventions.
- (2) My Interventions: a list of links to your saved interventions. You may opt to receive email updates for any of these saved interventions.

Past Webinars

Title	Intervention	Date	Time
No webinars have been conducted yet.			

Upcoming Webinars

Title	Intervention	Date	Time	Register
How to Use the Toolkit - Coach: Yue-Yung Hu, MD MPH	N/A	2/13/2020	4:00 PM	REGISTER
Flexible Vacation Policy - Coach: Jacob Greenberg, MD EdM	Flexible Vacation Policy	2/28/2020	4:00 PM	REGISTER

Intervention

RESIDENCY PSYCHOLOGIST

FLEXIBLE VACATION POLICY

Domain

Organizational Culture & Values
Resident Camaraderie

Receive Email Updates NO YES

Control & Flexibility
Organizational Culture & Values

Receive Email Updates NO YES

Webinars

Most coaching will begin with an introductory informational webinar conducted by the intervention's author or an early adopter. Depending on the specific intervention, coaching may move to a one-on-one or a small group format. As you progress with implementation, we will arrange these additional coaching interactions as needed. Please communicate with us about how we may help you!

Past Recordings

Recordings of recently completed webinars will be posted here.

Upcoming Webinars

Upcoming webinars for all interventions are listed here, including those you did not save. If you are interested in participating, click Register.

Webinars for My Interventions

Upcoming webinars for only your saved interventions are listed here. If you are interested in participating, click Register.

About

Our Mission

A refresher description of the SECOND Trial is given.

Our Story

This is the story of the FIRST Trial led us to the SECOND Trial!

Our Team

Photos and bios for our team are available here. If you're interested in joining our team, please email us at SECOND@northwestern.edu. We are always looking for good people!

Getting Started

We emailed you a Getting Started guide in December, along with your first Resident Well-Being and Learning Environment Report. It provides a framework and further detail for thinking about wellness. A copy is downloadable here.

FAQs

We've included some of the common questions we've been asked since launching the SECOND Trial. We will continue to populate this section as we receive questions from you. Ask away! You may use the Contact page on the Toolkit website or email us at SECOND@northwestern.edu.

References

- [1] Shanafelt TD, Noseworthy JH. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. *Mayo Clinic Proc* 2017;92(1):129-46.
- [2] National Academy of Sciences, Engineering, and Medicine. 2019. *Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being*. Washington, DC: The National Academies Press. <http://doi.org/10.17226/25521>.
- [3] Bilimoria KY, Chung JW, Hedges LV, Dahlke AR, Love R, Cohen ME, Hoyt DB, Yang AD, Tarpley JL, Mellinger JD, Mahvi DM. National cluster-randomized trial of duty-hour flexibility in surgical training. *N Engl J Med* 2016;374(8):713-27.
- [4] Hu YY, Ellis RJ, Hewitt DB, Yang AD, Cheung EO, Moskowitz JT, Potts JR, Buyske J, Hoyt DB, Nasca TJ, Bilimoria KY. Discrimination, abuse, harassment, and burnout in surgical residency training. *N Engl J Med* 2019;381(18):1741-52.
- [5] Stolarski A, Moseley JM, O'Neal P, Whang E, Kristo G. Retired surgeons' reflections on their careers. *JAMA Surg* 2019. doi:10.1001/jamasurg.2019.5476.