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The Surgical Pause

Last updated 5 months ago

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care before committing to a surgical plan. Recognized as a Promising Practice by the VHA Innovation Ecosystem's Diffusion of Excellence, the Surgical Pause utilizes the simple yet sophisticated Risk Analysis Index (RAI) to screen Veterans for frailty in 30 seconds, effectively flagging high risk Veterans so that the surgical team can ensure that the proposed treatment plans both mitigate known risks and align with the Veterans' overarching life goals. Transparent communication about the risks of protracted recovery or loss of independence after surgery empowers patients to consider non-operative management strategies. And for those who nonetheless elect surgical intervention, preoperative exercise training for as little as 3-6 weeks before surgery may improve outcomes by increasing physiologic reserve. By bringing additional resources to such frail patients, the Surgical Pause improves outcomes and adds value.

> This innovation is **scaling** widely with the support of national stakeholders. **See more scaling innovations.**

ORIGIN: July 2011, Omaha VA Medical Center (Omaha, Nebraska)

ADOPTIONS: 42 successful, 33 in-progress

AWARDS AND RECOGNITION: Part of SAGE QUERI Program (VISN 4) , Focus of the PAUSE Trial (HSR&D funded multi-site study), Diffusion of Excellence Promising Practice, Aligned with 4-Year HSR&D Funded Merit ... **See more**

PARTNERS: Diffusion of Excellence, Health Services Research & Development, Quality Enhancement Research Initiative

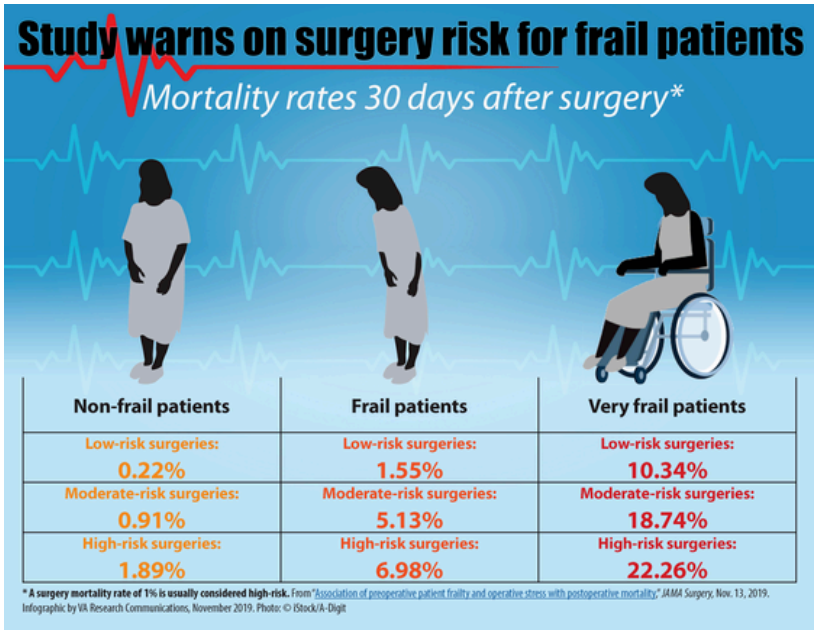
Overview

The problem

Data demonstrate that there is no such thing as low risk surgery in high risk, frail patients. Surgeons typically consider as "high

significantly higher than 1%. And when the patient is very frail, as many as 1 in 3 die within 6 mont ... See more

Images



ABOVE: There is no such thing as a low risk surgery for frail patients

Videos

Email



ABOVE: Watch Dr. Hall's iEX Talk about the Surgical Pause at the 2021 VHA Innovation Experience

The solution

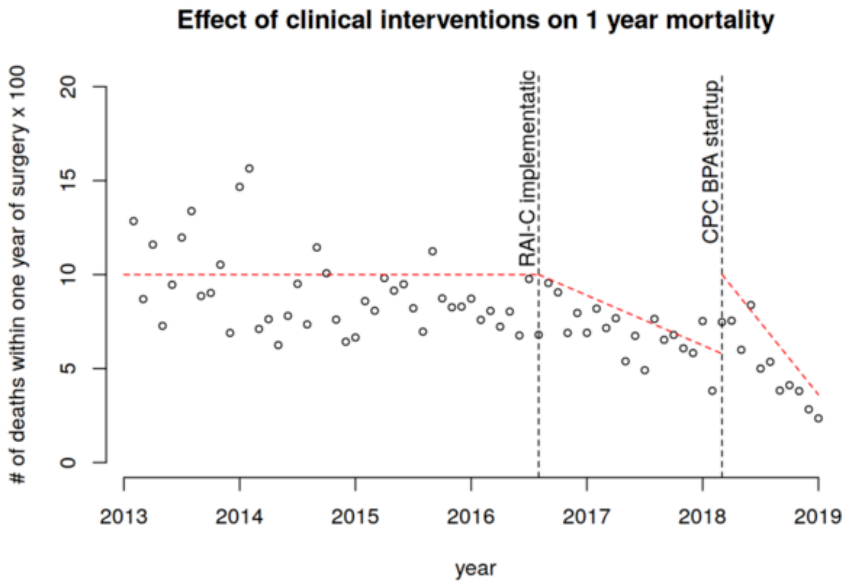
Step 1: Measure patient frailty with the Risk Analysis (RAI) for every patient considering elective surgery. It takes only 30 seconds

make informed, shared decisions about the treatment plan, surgical or otherwise, that is mos ... **See more**

The results

Interdisciplinary review of the care plan at the Omaha VAMC cut mortality among the frail from 25-8%, a 3-fold survival advantage. Preoperative goal clarification changed the care plan in Pittsburgh: 1 in 5 patients declined surgery in favor of non-operative management strategies. And exercise training for as little as 3 weeks before surgery achieved clinica ... **See more**

Images



ABOVE: Interrupted Time Sequence analysis with segmented Poisson regression among 28,786 surgical patients (14,127 before frailty screening; 5402 after). 1-year mortality decreased 0.2% per month following RAI Implementation (p=0.02) Rat of improvement increased to 0.87% per month after implementing Best Practice Alerts (BPAs) for frail patients.

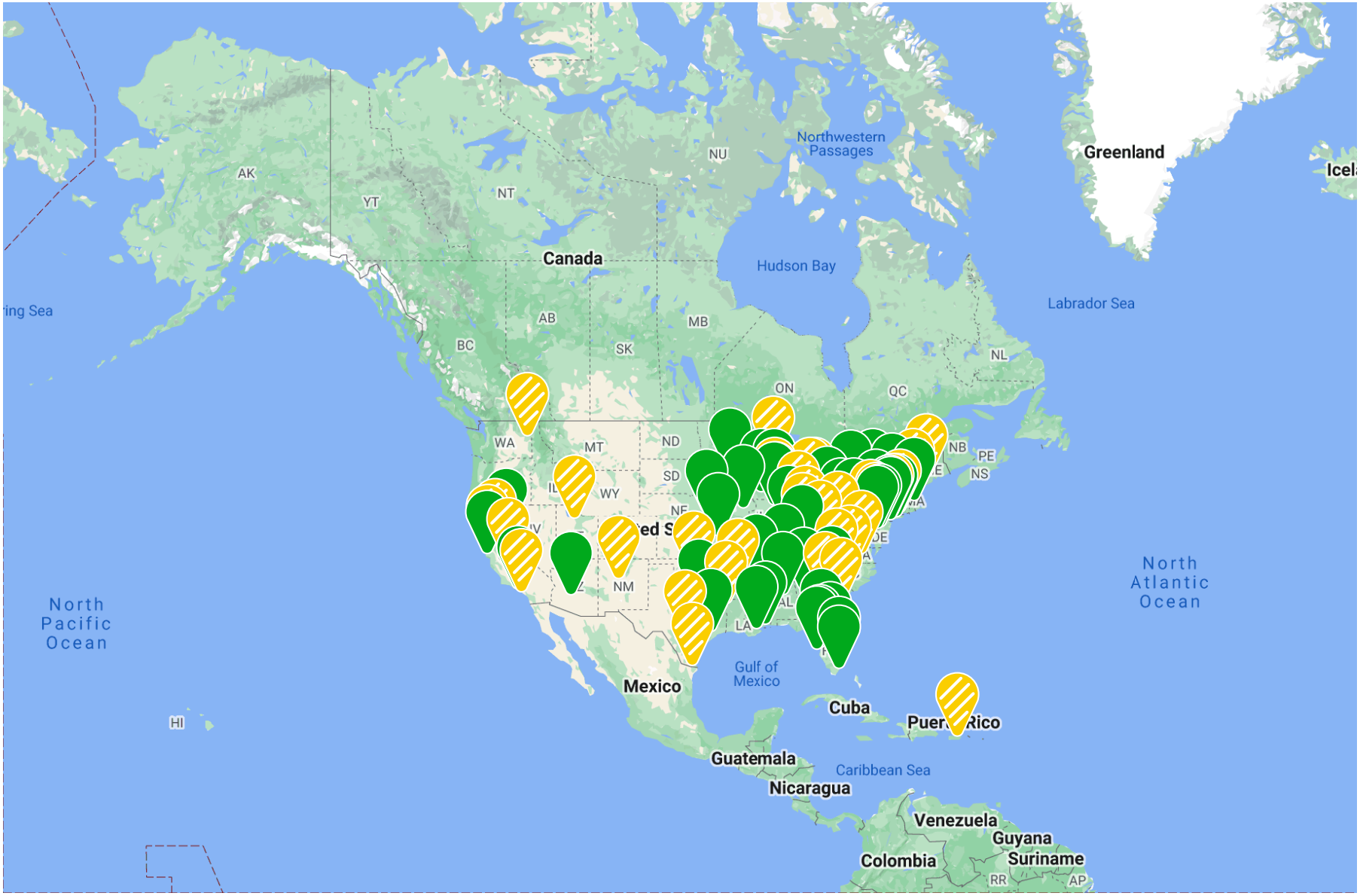
Metrics

- Length of Stay
- Post-Operative Complications

- Decision Regret
- Patient Centeredness of Care
- Cost
- Post-Operative Mortality

Diffusion tracker

Does not include Clinical Resource Hubs (CRH)



Successful adoptions

Email

Successful adoptions (42)

In-progress adoptions (33)

Unsuccessful adoptions (0)

Implementation

Timeline

- **1-2 MONTHS**

  Process Buildout

  -Identify pilot service line(s)

  -Train personnel to administer RAI

  -Locate RAI Template in CPRS and review the overview PowerPoint.

  -Engage with local leadership and stakeholders to gain buy-in

  -Reach out to VHASurgicalPause@va.gov for additional support in this phase if needed.

Implement RAI screening in clinic(s)

- **3-6 MONTHS**

  Validate RAI in local population to garner clinical support

- **3-6 MONTHS**

  Select appropriate interventions (e.g. interdisciplinary review, preoperative palliative care, or exercise) and build consensus

- **6-9 MONTHS**

  Begin interventions for patients identified as potentially "frail"

- **9-12 MONTHS**

  Program evaluation/measure outcomes

- **9-12 MONTHS**

  Bring on additional service/sections

Departments

- Anesthesia

- Nursing services
- Palliative and hospice care
- Physical medicine and rehabilitation
- Primary care
- Surgery

Core Resources

PEOPLE	• Surgeon Champion: 2-4 hours/week for the first 3 months to establish program; then 1-2 hours/week indefinitely to review frail cases • Nurse Champion: 1-2 hours/week for the first 3 months to establish procedure for measuring RAI; then intermittent maintenance. • Data Manager: 1-2 hours/week for first 3 months to establish procedure for data aggregation and analysis. After establishing procedures, time commitment limited to generating periodic reports of process and outcome measures.
PROCESSES	• Surgical Pause Implementation Guide
TOOLS	• Online RAI calculation tool (provided free of charge and embedded in CPRS Template) • CPRS VA RAI FRAILTY TOOL Template • Health Factors: VA RAI FRAILTY SCORE and VA RAI FRAILTY SCORE WITHOUT CANCER

- Comprehensive implementation guide for sites seeking to implement the Surgical Pause Surgical Pause Implementation Guide
- RAI Handout for patients to complete RAI Handout
- National Surgery Office Memorandum supporting use of the Surgical Pause NSO Endorsement of Surgical Pause
- VHA Program Guide 1200.21 Operations Activities that May Constitute Research VHA Operations Guide
- A guide for using the Risk Analysis Index within Epic Medical Record Platforms Screening for Frailty in Pre-Op Patients (EPIC)
- Instructions for using the new PowerApps Calculator (replacing REDCap) CPRS RAI Frailty Tool Updates - March 2022
- How-To Guide on using the RAI Frailty Tool in CPRS Using the RAI Frailty Tool in CPRS

Links

- Videotaped presentation (38 minute) providing provider-focused overview of The Surgical Pause: Preoperative Frailty Screening and Prehabilitation
- Videotaped presentation (13 minutes) focused on to implement the RAI as part of the outpatient clinic for Pre-Operative Frailty Screening and Prehabilitation
- VA PowerApps RAI Frailty Tool/Calculator (No PII/PHI) RAI PowerApps Frailty Calculator

Optional Resources

PEOPLE	• Multidisciplinary Review Board: 1 hour/week to review cases. Representation from surgery, anesthesia, geriatrics, PM&R, primary care and palliative care are possibilities) • Goal Clarification: 1-2 hours/week to conduct patient consultation to clarify goals. Personnel should have expertise in communication and value elicitation (e.g., palliative care or equivalent)

- Presenter Slides from Day 1 of the Surgical Pause Symposium Surgical Pause Symposium June 2023 - Day 1
- Presenter Slides from Day 2 of the Surgical Pause Symposium Surgical Pause Symposium June 2023 - Day 2

Support Resources

TOOLS

- Numerous Publications

Files

- (2020 Annals of Surgery) Clinical Utility of the Risk Analysis Index as a Prospective Frailty (2020 Annals of Surgery) Clinical Utility of the Risk Analysis Index as a Prospective Frailty
- (2020 Annals of Surgery) Recalibration and External Validation of the RAI (2020 Annals of Surgery) Recalibration and External Validation of the RAI
- (2023 Journal of Surgical Oncology) Interpreting the risk analysis index of frailty in the context of surgical oncology (2023 Journal of Surgical Oncology) Interpreting the risk analysis index of frailty in the context of surgical oncology

Links

- Association Between Patient Frailty and Postoperative (2020 JAMA) Association Between Patient Frailty and Postoperative
- (2020 JAMA Network) Association of Preoperative Frailty and Operative Stress With Mortality (2020 JAMA Network) Association of Preoperative Frailty and Operative Stress With Mortality
- (2020 Annals of Surgery) Recalibration and External Validation of the RAI (2020 Annals of Surgery) Recalibration and External Validation of the RAI

- (2019 JAMA Surgery) Association of Preoperative Patient Frailty and Operative Stress (2019 JAMA Surgery) Association of Preoperative Patient Frailty and Operative Stress
- (2018 American College of Surgeons) Taking Control of Your Surgery-Impact of a prehabilitation program on major abdominal surgery (2018 American College of Surgeons) Taking Control of Your Surgery-Impact of a prehabilitation program on major abdominal surgery
- (2017 JAMA Surgery) Association of frailty screening (2017 JAMA Surgery) Association of frailty screening
- (2017 PNAS) On the promotion of human flourishing (2017 PNAS) On the promotion of human flourishing
- (2014 JAMA Surgery) Summary of the Panel Session at the 38th Annual Surgical (2014 JAMA Surgery) Summary of the Panel Session at the 38th Annual Surgical
- (2014 JAMA Surgery) Surgical Palliative Care Consultations Over Time (2014 JAMA Surgery) Surgical Palliative Care Consultations Over Time
- (2011 Annals of Family Medicine) Measuring Patients' Perceptions of Patient Centered Care - A Systematic Review of Tools for Family Medicine (2011 Annals of Family Medicine) Measuring Patients' Perceptions of Patient Centered Care - A Systematic Review of Tools for Family Medicine
- (2003 Medical Decision Making) Validation of a Decision Regret Scale (2003 Medical Decision Making) Validation of a Decision Regret Scale

Risks and mitigations

RISK	MITIGATION
Not using the RAI (Risk Analysis Index) tool consistently.	Make it part of new training and create leadership in asking for it everytime.
Slightly increased burden on nurses during clinic inpatient	Use CPRS RAI Template to reduce burden and adjust other

RISK	MITIGATION
Implementing RAI too late in the journey to the operating room; it is hard to change plans after surgery is scheduled.	Ensure that the RAI is measured before scheduling surgery, ideally on initial presentation to the surgery clinic and before meeting the surgeon.

Contact

Comment

> Comments and replies are disabled for retired innovations and non-VA users.

VA User (Nurse) posted 4 months ago

Do you have the RAI questions (toolkit) for others to use?

VA User (RN) posted 3 years ago

Is there a way I can print this out in PDF format?

VA User (Clinical Application Coordinator) deleted 3 years ago

This comment has been deleted.

VA User (CPRS Clinical Applications Coordinator) deleted 3 years ago

This comment has been deleted.

VA User (QPS Specialist) **INNOVATION OWNER** posted 3 years ago

This is such a great tool and the Implementation guide is wonderful.

Show 1 reply

Email

Email vhaco.national.surgery.office@va.gov with questions about this innovation.

About

Origin story

As soon as Dr. Jason Johanning assumed leadership as Chief of Surgery at the VA Medical Center in Omaha, NE, he had an urgent problem to solve: Postoperative mortality at his center had been well above normal for over a year. Dr. Johanning followed his clinical intuition that older frail patients were experiencing disproportionately poor outcomes. He revised ... **See more**

Original team

Daniel Hall
Surgeon

Jason Johanning
Chief of Surgery

Shipra Arya
Surgeon

Myrick Shinall
Surgeon

Nader Massarweh
Surgeon

Thomas Lynch
Surgeon

Thomas Edes
Director, Comprehensive Geriatrics & Palliative Care

Scott Shreve
National Director of Hospice Palliative Care

Mark Wilson
Chief of Surgery, VA Pittsburgh Healthcare System

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