
Thoracic Education Cooperative Group

Opportunities for Research in Thoracic Surgery Education

David Odell – President

Ikenna Okereke – Incoming President

What is TECoG?

- Focused on the development and dissemination of high quality, rigorous research in education
- Initially founded as an independent group, became a formal part of the TSDA in 2017.
 - Open membership model
 - Bimonthly working group calls
 - Help with study development
 - Partner Recruitment

Use Research to Drive Improvement in Thoracic Surgery Education

Surgical Community Came Together for FIRST Trial and Changed National Policy



Accreditation Council for
Graduate Medical Education

DATE: March 10, 2017

FROM: Thomas J. Nasca, MD, MACP, Chief Executive Officer, Accreditation Council for Graduate Medical Education

The ACGME Common Program Requirements Section VI revisions have been approved by the ACGME Board of Directors to be implemented during the 2017-2018 academic year.

At the heart of the new requirements is the philosophy that residency education must occur in a learning and working environment that fosters excellence in the safety and quality of care delivered to patients both today and in the future. An important corollary is that physician well-being is crucial to deliver the safest, best possible care to patients.

In keeping with this philosophy, the changes are supported by *testimony* from a wide range of physician specialty educators and intended to:

- place greater emphasis on patient safety and quality improvement;
- more comprehensively address physician well-being;
- strengthen expectations around team-based care; and,
- create flexibility for programs to schedule clinical and educational work hours within the maximums currently utilized in the US.

These revisions were developed as part of the ACGME's periodic review of all program requirements to ensure that professional preparation of physicians adequately addresses the evolving and growing needs of patients. This review began in 2015 and, over the last year, the Common Program Requirements Phase 1 Task Force reviewed the published scientific literature on the impact of existing standards on the quality and safety of patient care, resident and fellow well-being, and resident and fellow clinical care and education hours.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

FEBRUARY 25, 2016

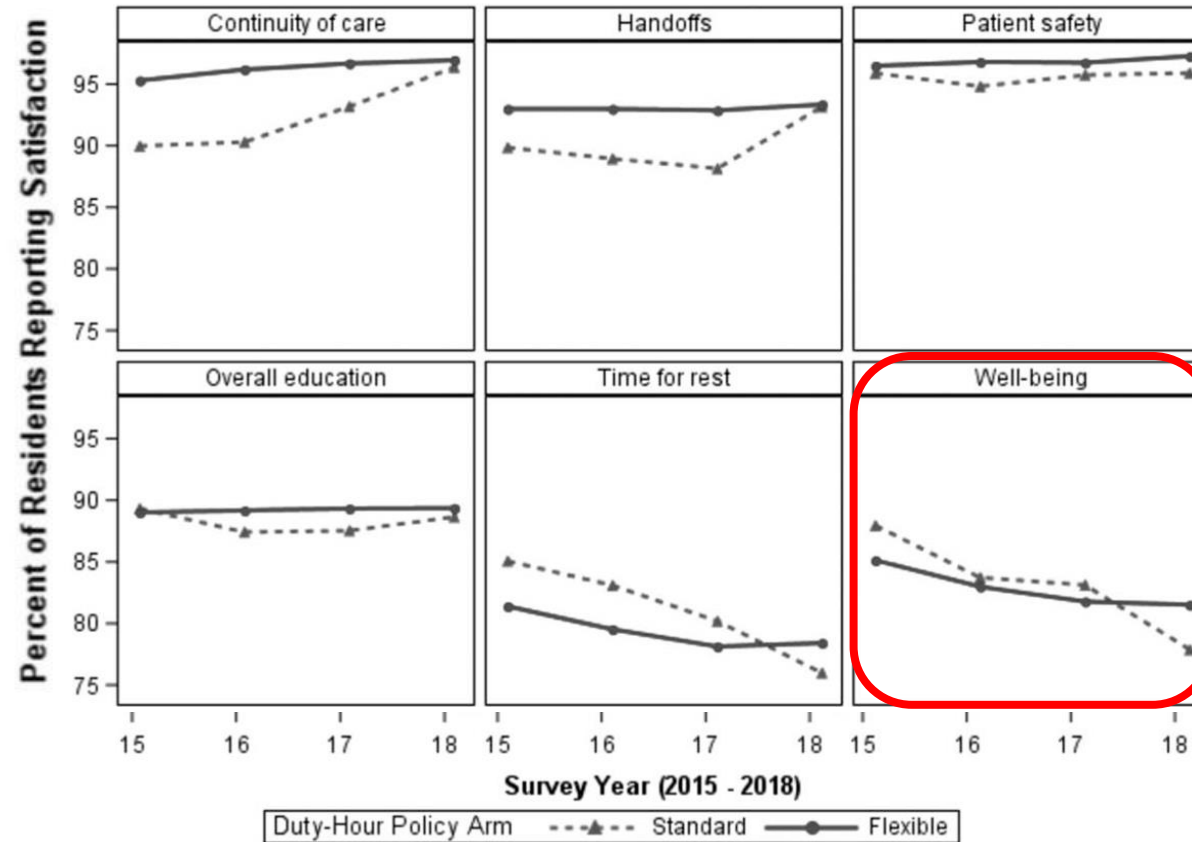
VOL. 374 NO. 8

National Cluster-Randomized Trial of Duty-Hour Flexibility in Surgical Training

Karl Y. Bilimoria, M.D., M.S.C.I., Jeanette W. Chung, Ph.D., Larry V. Hedges, Ph.D., Allison R. Dahlke, M.P.H., Remi Love, B.S., Mark E. Cohen, Ph.D., David B. Hoyt, M.D., Anthony D. Yang, M.D., John L. Tarpley, M.D., John D. Mellinger, M.D., David M. Mahvi, M.D., Rachel R. Kelz, M.D., M.S.C.E., Clifford Y. Ko, M.D., M.S.H.S., David D. Odell, M.D., M.M.Sc., Jonah J. Stulberg, M.D., Ph.D., M.P.H., and Frank R. Lewis, M.D.

4 Years of Flexibility

Perceptions of Residents in the Flexible Arm of FIRST



SPECIAL ARTICLE

Discrimination, Abuse, Harassment, and Burnout in Surgical Residency Training

Yue-Yung Hu, M.D., M.P.H., Ryan J. Ellis, M.D., M.S.C.I.,
D. Brock Hewitt, M.D., M.P.H., Anthony D. Yang, M.D., Elaine Ooi Cheung, Ph.D.,
Judith T. Moskowitz, Ph.D., M.P.H., John R. Potts III, M.D., Jo Buyske, M.D.,
David B. Hoyt, M.D., Thomas J. Nasca, M.D., and Karl Y. Bilimoria, M.D., M.S.C.I.

N ENGL J MED 381;18 NEJM.ORG OCTOBER 31, 2019

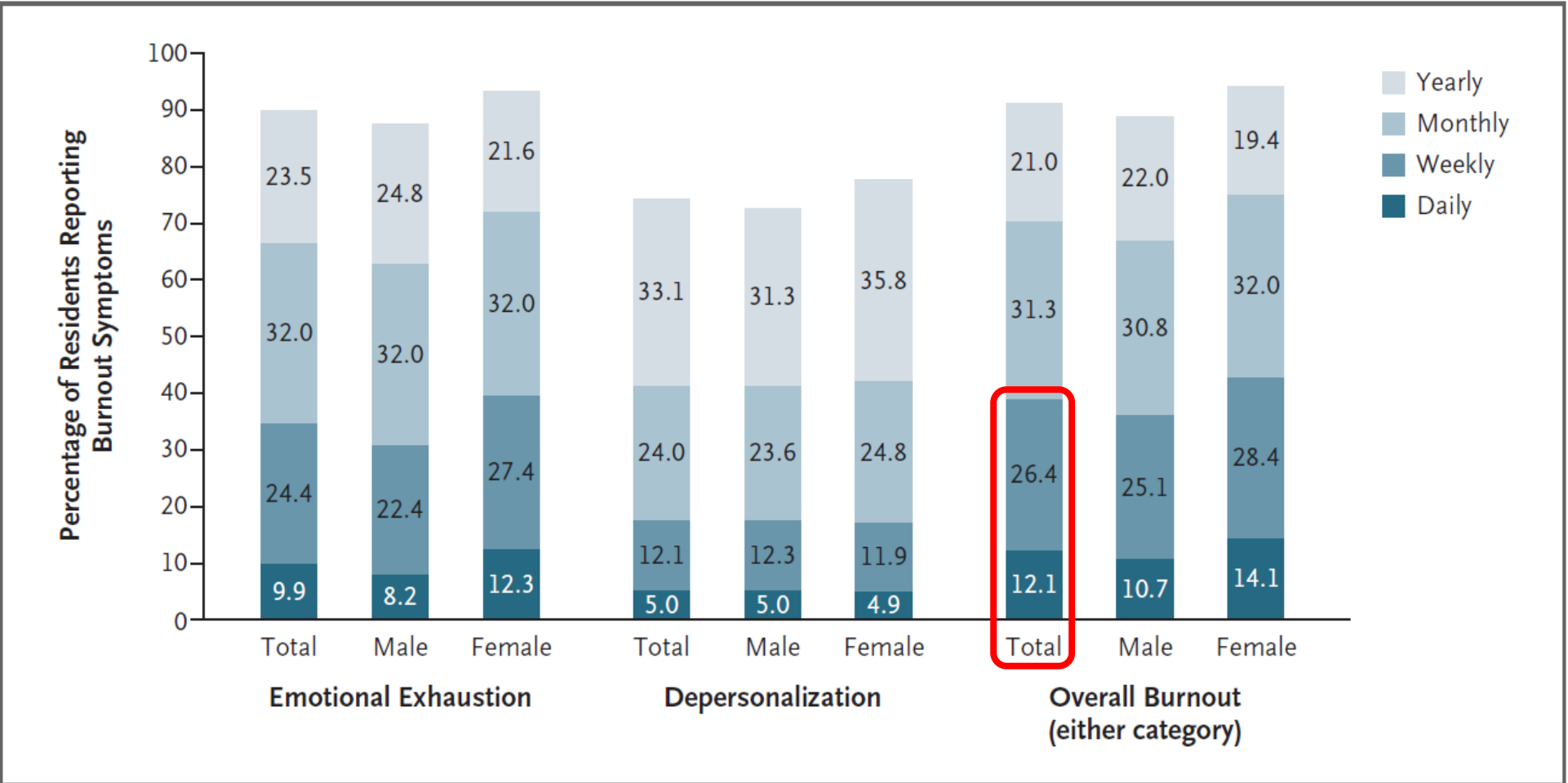
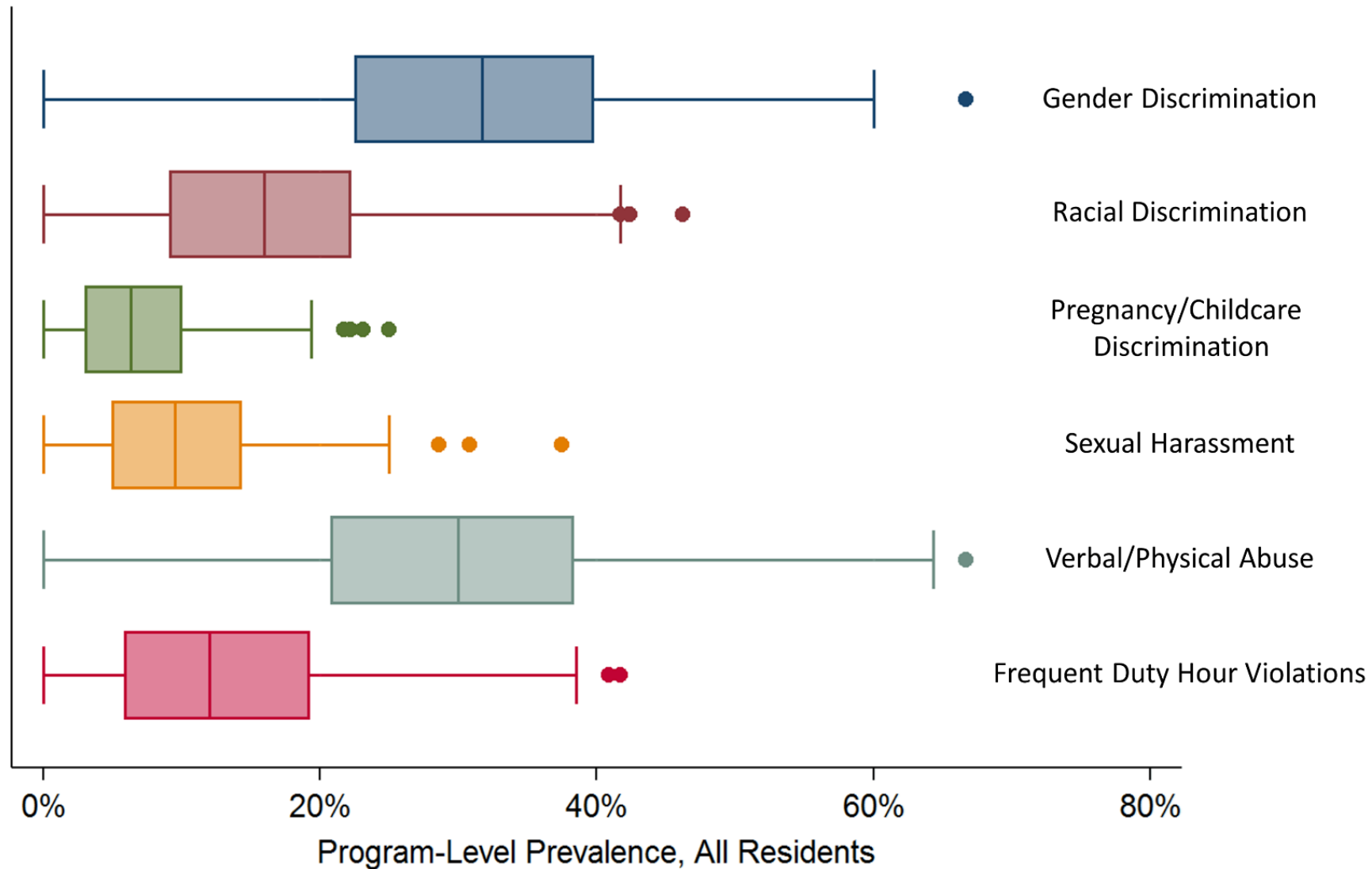


Figure 1. Frequency of Burnout Symptoms Reported by Surgical Residents, According to Self-Identified Gender. Shown are the percentages of residents with symptoms of emotional exhaustion, depersonalization, and burnout (either emotional exhaustion or depersonalization).

Considerable Program-Level Variation



Focus Groups and Interviews with PDs

- “Always hearing about burnout and wellness”
- Hard to quantify
 - Programs have no way to measure or benchmark
- Hard to solve
 - Not sure what to implement or even what the options are
 - Interventions are only available by word-of-mouth; **no catalog**
 - Interventions are context-specific and rarely surgical – not easy to export
 - No robust data on whether existing interventions work



RASACS
RESIDENT AND ASSOCIATE SOCIETY



AMERICAN COLLEGE OF SURGEONS
*Inspiring Quality:
Highest Standards, Better Outcomes*



**Accreditation Council for
Graduate Medical Education**



The AMERICAN BOARD of SURGERY
Promoting surgical excellence since 1937



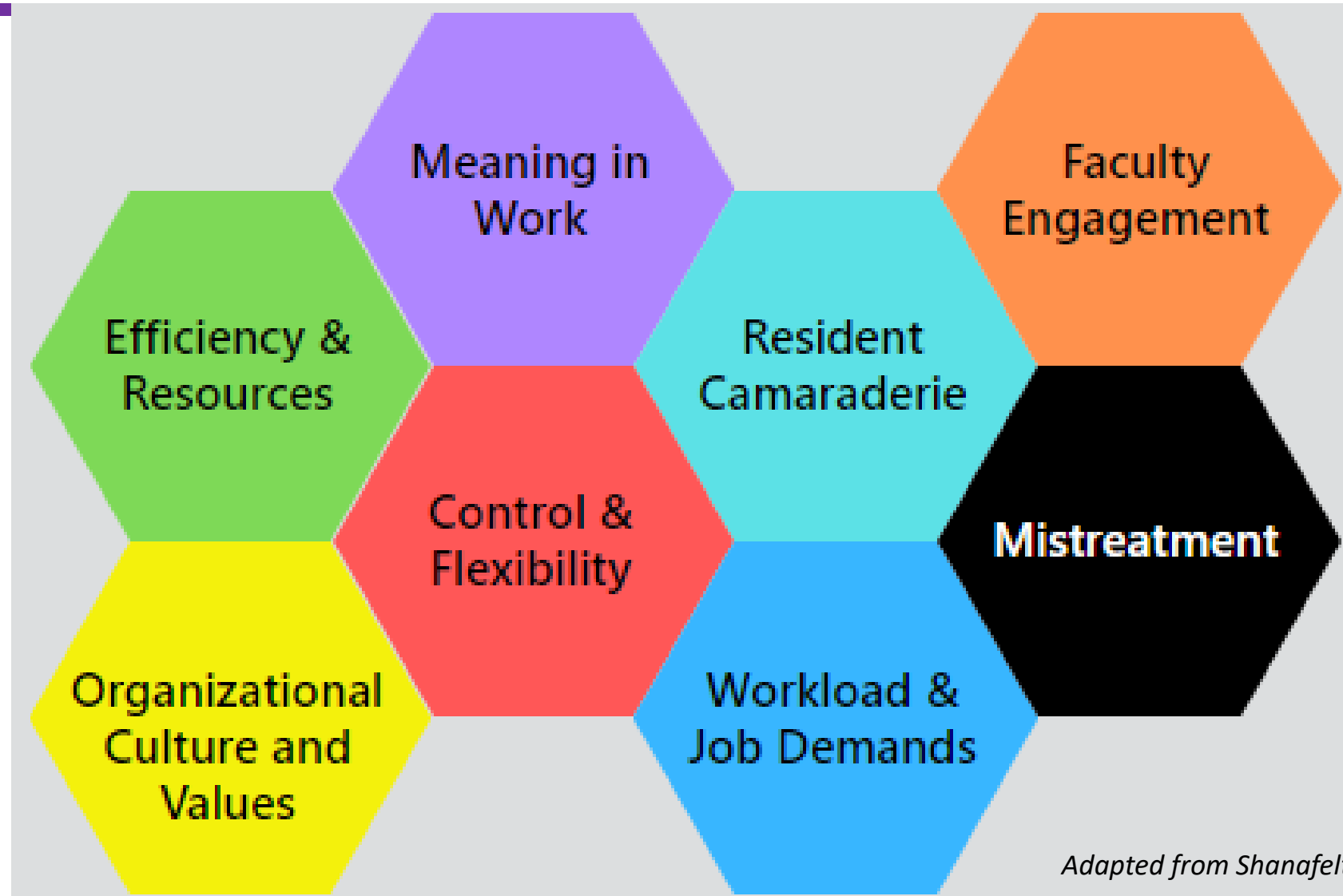
**SOCIETY OF
SURGICAL CHAIRS**
Established in 1965

The SECOND Trial

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

TECoG
Thoracic Education Cooperative Group

What Leads to Burnout in Surgical Training?



Adapted from Shanafelt

Sample Program Well-Being Report

2019 SECOND TRIAL LEARNING ENVIRONMENT & RESIDENT WELL-BEING REPORT

SECOND Trial Program Number:
Program Size:
Program Type:

1006
Large (>27 residents)
Academic



This report is based on data from the annual post-ABSITE survey taken by your residents each year. The report is intended to highlight areas where your program is performing well and areas that may merit attention. The "Getting Started" document contains instructions for interpretation of this report. Please email SECOND@northwestern.edu with any questions or suggestions on how to improve or clarify the report.

	Your Program's Performance Quartile			Benchmarks: Ranges for Each Quartile for All Programs in the Country				Unit of Measurement
	Compared to All Programs in the Country	Compared to Large (>27 residents) Sized Programs	Compared to Academic Programs	Q1 Range	Q2 Range	Q3 Range	Q4 Range	
Burnout (6-Item Composite)	Q3	Q3	Q3	0.0-29.9	30.0-41.9	42.0-52.9	53.0-86.0	% Reporting at least Weekly Symptoms
Emotional Exhaustion (3-Item Composite)	Q3	Q3	Q3	0.0-27.9	28.0-37.9	38.0-47.9	48.0-79.0	% Reporting at least Weekly Symptoms
Depersonalization (3-Item Composite)	Q3	Q3	Q3	0.0-13.9	14.0-21.9	22.0-29.9	30.0-71.0	% Reporting at least Weekly Symptoms
Personal Accomplishment (3-Item Composite)	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	96.0-100.0	91.0-95.9	84.0-90.9	53.0-83.9	% Reporting at least Weekly Sentiments
Thoughts of Attrition	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	0.0-5.3	5.4-10.8	10.9-15.8	15.9-57.9	% Reporting Occurrence
Suicidal Thoughts	Q3	Q3	Q3	0.0-0.0	0.1-3.2	3.3-6.9	7.0-33.3	% Reporting Occurrence
Workload & Job Demands (3-Item Composite)	Q3	Q3	Q3	0.0-7.7	7.8-12.0	12.1-17.5	17.6-44.1	Factor Score on 0-100 Scale
80-hour violations	Q3	Q2	Q3	0.0-21.7	21.8-34.8	34.9-49.2	49.3-88.9	% Reporting Any Months of Violations
1 day off in 7 violations	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	0.0-0.0	0.1-7.0	7.1-13.0	13.1-56.0	% Reporting ≥ 2 Months of Violations
Call >1 in 3 nights violations	Q3	Q3	Q3	0.0-0.0	0.1-3.9	4.0-7.9	8.0-60.0	% Reporting ≥ 2 Months of Violations
Resident Camaraderie (3-Item Composite)	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	3.4-3.8	3.2-3.3	3.0-3.2	2.4-3.0	Factor Score on 0-5 Scale
Appreciated by co-residents	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	4.3-5.0	4.1-4.3	4.0-4.1	3.3-4.0	Avg. Agreement on 1-5 Scale
Residents cooperate	Q3	Q4: Merits Attention	Q4: Merits Attention	4.5-5.0	4.3-4.5	4.1-4.3	3.2-4.1	Avg. Agreement on 1-5 Scale
Co-residents among closest friends	Q3	Q4: Merits Attention	Q4: Merits Attention	4.0-4.8	3.7-4.0	3.5-3.7	2.5-3.5	Avg. Agreement on 1-5 Scale
Faculty Engagement (2-Item Composite)	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	2.7-3.1	2.5-2.7	2.4-2.5	1.7-2.4	Factor Score on 0-5 Scale
A mentor who genuinely cares	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	4.1-5.0	3.8-4.1	3.6-3.8	2.9-3.6	Avg. Agreement on 1-5 Scale
Appreciated by attendings	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	4.1-4.8	3.9-4.1	3.8-3.9	2.3-3.8	Avg. Agreement on 1-5 Scale
Organizational Culture & Values/Flexibility & Control (4-Item Composite)	Q3	Q3	Q3	3.4-4.0	3.2-3.4	3.0-3.2	1.9-3.0	Factor Score on 0-5 Scale
Program takes my wellness seriously	Q3	Q3	Q3	4.2-4.9	3.9-4.1	3.7-3.9	2.1-3.7	Avg. Agreement on 1-5 Scale
Program helps decompress/debrief/cope after adverse events	Q3	Q3	Q3	3.8-4.6	3.5-3.7	3.2-3.5	2.1-3.2	Avg. Agreement on 1-5 Scale
Program emphasizes learning not blame from adverse events	Q4: Merits Attention	Q4: Merits Attention	Q4: Merits Attention	4.1-5.0	3.9-4.1	3.7-3.9	2.6-3.7	Avg. Agreement on 1-5 Scale
Program responsive to resident concerns	Q3	Q3	Q3	3.1-5.0	2.8-3.1	2.5-2.8	2.1-2.5	Avg. Agreement on 1-5 Scale
Burnout is a problem in my program (reverse-coded so higher scores better)	Q3	Q3	Q3	4.3-5.0	4.0-4.2	3.7-4.0	1.9-3.7	Avg. Agreement on 1-5 Scale



The SECOND Trial

Surgical Education Culture Optimization through targeted interventions based on National comparative Data

Learning Environment Report

2020 SECOND TRIAL - VASCULAR SURGERY LEARNING ENVIRONMENT & TRAINEE WELL-BEING REPORT

SECOND Trial - Vascular Surgery Program Number:
Program Size:

8067
Large (7-18 trainees)



The SECOND Trial
Vascular Surgery

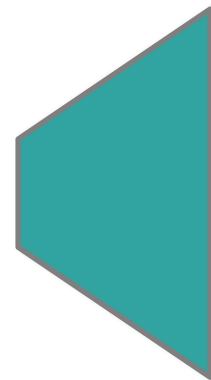
This report is based on data from the annual post-VSITE survey taken by your residents and fellows each year. The report is intended to highlight areas where your program is performing well and areas that may merit attention. The "Getting Started" document contains guidelines for interpreting this report. Please email SECOND@northwestern.edu with any questions or for clarifications about your report.

	Your Program's 2020 Performance		Benchmarks: Ranges for Exemplary†, Non-Outlier, and Outlier Groups for All Programs in the Country			Unit of Measurement
	Compared to All Programs in the Country	Compared to Large (7-18 trainees) Sized Programs	Exemplary†	Not an Outlier	Outlier: Merits Attention	
Burnout (6-Item Composite)	Outlier: Merits Attention	Outlier: Merits Attention	0%	1-50%	51-100%	% Reporting at least Weekly Symptoms
Emotional Exhaustion (3-Item Composite)	Outlier: Merits Attention	Not an Outlier	0%	1-50%	51-100%	% Reporting at least Weekly Symptoms
Depersonalization (3-Item Composite)	Not an Outlier	Not an Outlier	0%	1-25%	26-67%	% Reporting at least Weekly Symptoms
Personal Accomplishment (3-Item Composite)	Exemplary	Exemplary	100%	89-99%	33-88%	% Reporting at least Weekly Sentiments
Thoughts of Attrition	Outlier: Merits Attention	Outlier: Merits Attention	0%	1-11%	12-50%	% Reporting Any Occurrence
Suicidal Thoughts	Exemplary	Exemplary	0%	1-8%	9-50%	% Reporting Any Occurrence
Workload & Job Demands (3-Item Composite)	Not an Outlier	Not an Outlier	0%	1-33%	33-54%	Factor Score on 0-100 Scale
80-hour violations	Exemplary	Exemplary	0%	1-49%	50-100%	% Reporting Any Months of Violations
I feel pressured to underreport my duty hours	Exemplary	Exemplary	1.0	1.1-2.7	2.7-4.0	Avg. Agreement on 1-5 Scale
I continue to complete non-educational task work while at home	Not an Outlier	Not an Outlier	1.0	1.1-3.5	3.6-4.5	Avg. Agreement on 1-5 Scale
Work-Life Integration (3-Item Composite)	Not an Outlier	Not an Outlier	5.0	2.3-4.9	1.2-2.2	Factor Score on 0-5 Scale
Satisfied with time for personal life (e.g., family, hobbies, social life)	Not an Outlier	Not an Outlier	5.0	3.0-4.9	1.6-2.9	Avg. Agreement on 1-5 Scale
Satisfied with ability to maintain healthy habits (e.g., exercise, eat healthy)	Not an Outlier	Not an Outlier	5.0	2.8-4.9	1.4-2.8	Avg. Agreement on 1-5 Scale
Satisfied with ability to perform health maintenance (e.g., see dentist, PCP)	Not an Outlier	Not an Outlier	5.0	2.7-4.9	1.5-2.6	Avg. Agreement on 1-5 Scale

* not actual program data

Wellness Toolkit is Being Used and Updated

- Program Director Survey (Wellness Inventory)
- Phone calls with program directors & coordinators to clarify/gather additional detail
- Literature review & guidelines
- Program Tours (20-30)
 - Identify by
 - Data
 - PD survey
 - Snowball sampling
 - Observations
 - Interviews/focus groups
 - Policy/procedure review



Residents
Attendings
Nurses
Chair and PD
GMEC / DIO



The SECOND Trial

Surgical Education Culture Optimization through targeted interventions based on National comparative Data

WELLNESS TOOLKIT

Intervention	Domain ?	Cost ?	Effort ?	Time ?	Maslow ?
RESET FILTERS	Mistreatment	Filter by Cost...	Filter by Effort...	Filter by Time...	Filter by Maslow level
ADDRESSING MISTREATMENT FROM PATIENTS	Mistreatment Organizational Culture & Values	1 cost icon	1 effort icon	1 time icon	3 Respect & Inclusion
FACING CULTURAL COMPLICATIONS IN M&M	Mistreatment Organizational Culture & Values	2 cost icons	2 effort icons	2 time icons	3 Respect & Inclusion
IMPLICIT BIAS TRAINING	Mistreatment Organizational Culture & Values	2 cost icons	2 effort icons	2 time icons	3 Respect & Inclusion
MICRO-AGGRESSION TRAINING	Mistreatment Organizational Culture & Values	2 cost icons	2 effort icons	2 time icons	2 Safety & Security
RECRUITMENT STRATEGIES FOR A MORE INCLUSIVE PROGRAM	Mistreatment Organizational Culture & Values	2 cost icons	2 effort icons	2 time icons	3 Respect & Inclusion
TRAINING ALLIES	Faculty Engagement Mistreatment Organizational Culture & Values Resident Camraderie	2 cost icons	2 effort icons	2 time icons	3 Respect & Inclusion

Sample Wellness Toolkit Interventions



Chair: John Sweeney, MD
PD: Keith Delman, MD
(kdelman@emory.edu)

Half-Weekday Off per Month

- How we did it
- Arranging coverage
- Mitigating safety issues
- Keys to success



Chair: Mary Hawn, MD
PD: David Spain, MD
(dspain@stanford.edu)

High Performance Team Training

- How we did it
- Identifying a psychologist who understands surgical training
- Convincing surgeons to go
- Arranging coverage
- What did it cost?
- Keys to success



Chair: Rebecca Minter, MD
PD: Jacob Greenberg, MD
(jgreenberg@uw.edu)

Lactation Policy

- How we did it
- Finding appropriate space at each clinical site
- Training faculty/residents
- Keys to success

SECOND Trial for Thoracic Programs

Opportunities

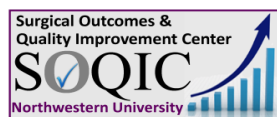
- Leverage the resources built for general surgery
- Provide specific data and tools to programs
- Address ACGME Wellness requirements

Logistics

- Deliver initial survey early in the academic year to begin and then with the ITE thereafter.
- Local IRB process is not required (not human subjects research determination)



THORACIC SURGERY
RESIDENTS ASSOCIATION



TSDA

THORACIC SURGERY
DIRECTORS ASSOCIATION

- Recent publications
- Luc J, Reddy R, Corsini E, Carrott P, David E, Shemanski K, Fabian T, McCarthy D, Okereke I, Oliver A, Turner S, Vaporciyan A, Antonoff M, TECoG. Are Esophagectomy Board Requirements Achievable? A Multi-Institutional Analysis. *Semin Thorac Cardiovasc Surg* March 2021
- Taylor M, Wallen T, Mehaffey J, Shirafkan A, Brescia A, Freeman K, Louis C, Watson J, Okereke I. Interviews During the Pandemic: A Thoracic Education Cooperative Group and Surgery Residents Project. *Ann Thor Surg* February 2021
- Bharadwaj S, Luc J, Love R, Antonoff M, Odell D. The Unfulfilled Need for Technical Skill Assessments among Academic Cardiothoracic Surgeons. Accepted *Semin Thorac Cardiovasc Surg* March 2021