SESSION II | 9:45AM-10:35AM

NORTHERN CALIFORNIA CHAPTER ACS

ANNUAL MEETING

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GRAND HYATT SAN FRANCISCO

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Abstract #11 | Clinical Medicine | Colorectal Surgery

Enhancing Watch-and-Wait Rectal Cancer Surveillance: Evaluation of an Automated Informatics-Based "Health Maintenance Plan"

Jon Freise, Hueylan Chern, Elizabeth Wick, Emily Finlayson, Madhulika G. Varma, Beiqun (Mark) Zhao - UCSF

Objective:
To evaluate an automated informatics tool designed to centralize surveillance for patients with rectal cancer enrolled in watch-and-wait (WW).

Background:
Although WW provides an organ-preservation strategy for rectal cancer, up to one-third of patients on WW may experience local regrowth or distant recurrence, necessitating strict surveillance adherence. However, maintaining adherence is challenging for both patients and providers.

Methods:
To evaluate the impact of a centralized and automated informatics-based "health maintenance plan" (HMP) integrated into the electronic health record designed for WW surveillance, we compared surveillance adherence before and after the HMP activation date using Chi-square testing. The pre-HMP cohort included 12 months prior to activation date while the post-HMP cohort included 7 months following a 3-month implementation phase after HMP activation. Adherence was assessed after patients completed ≥ 6 months of active WW surveillance.

Results:
Table 1 lists the adherence rates by surveillance modality in the pre-HMP and post-HMP cohorts. Endoscopic adherence improved from 75.8% to 86.1% ($p=0.02$) and CEA adherence improved from 52.2% to 68.5% ($p<0.01$). CT and MRI adherence did not differ significantly. 15.6% (n=7) of patients in our registry (n=45) had regrowth.

Conclusion:
The automated HMP tool may streamline provider workflow by centralizing WW surveillance and decreasing provider burden. With ongoing training and integration efforts, the HMP has the potential to reduce resource utilization for adherence monitoring while maintaining or improving overall surveillance adherence. Future efforts will focus on continued workflow optimization with the HMP and addressing additional barriers to WW surveillance adherence.

Table 1. Adherence rates by surveillance modality before and after implementation of HMP

Surveillance Modality	Pre-HMP Adherent*	Pre-HMP non-adherent**	Pre-HMP Adherence (%)	Post-HMP Adherent*	Post-HMP non-adherent**	Post-HMP Adherence (%)	p value
CT	162	16	91.0%	165	22	88.2%	0.60
MRI	157	21	88.2%	165	22	88.2%	1.00
Endoscopy	135	43	75.8%	161	26	86.1%	**0.02**
CEA	93	85	52.2%	128	59	68.5%	**<0.01**

* = # of instances (imaging, procedure, tests) of adherence

** = # of instances (imaging, procedure, tests) of non-adherence

Abstract #12 | Clinical Science | Thoracic Surgery

Prevalence of Lung Cancer in Never-Smoking Asian American Women by Ethnicity and Cancer History: Findings from an Integrated Healthcare System in Northern California

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Objective

Despite declining U.S. lung cancer incidence, rates among never-smoking Asian American (AsA) women are rising. Prior studies often aggregate Asian populations, obscuring subgroup differences. We compared primary lung cancer prevalence across disaggregated AsA subgroups and examined associations with personal and family cancer histories relative to Non-Hispanic Whites (NHW).

Methods

Analyzing electronic health records from a large Northern California integrated health system (2010–2022), we stratified 1,843,119 women by smoking status and ethnicity (Chinese, Japanese, Filipino, Korean, Vietnamese, Other Asian). Targeted maximum likelihood estimation (TMLE), a flexible double-robust estimator, calculated adjusted prevalence ratios (aPRs) for never-smoking AsA subgroups relative to NHW, adjusting for sociodemographic and clinical characteristics.

Results

Among 2,429 never-smoking cases, aPRs were highest in Chinese (aPR 3.36 [95% CI: 3.20–3.53]) and Filipino women (2.68 [2.55–2.82]), followed by Vietnamese (2.07 [1.96–2.18]), Japanese (1.99 [1.89–2.10]), and Korean (1.90 [1.80–2.00]). Conversely, prevalence was lower in Other Asians (0.35 [0.33–0.37]). Personal cancer history nearly tripled prevalence in Koreans (2.91 [2.76–3.06]), while family cancer history increased prevalence in Chinese women (1.51 [1.42–1.60]). Uterine cancer history also elevated risk in Chinese women (1.91 [1.58–2.31]).

Discussion

Never-smoking AsA women exhibit significant heterogeneity in lung cancer prevalence. Markedly elevated risks in specific subgroups, alongside associations with personal and family cancer histories, underscore the urgent need for disaggregated, history-informed screening guidelines to improve early detection and targeted prevention.

Abstract #13 | Advocacy | General Surgery

Exploring Geographic Differences in Minimally Invasive Whipple: A Joinpoint Regression Analysis

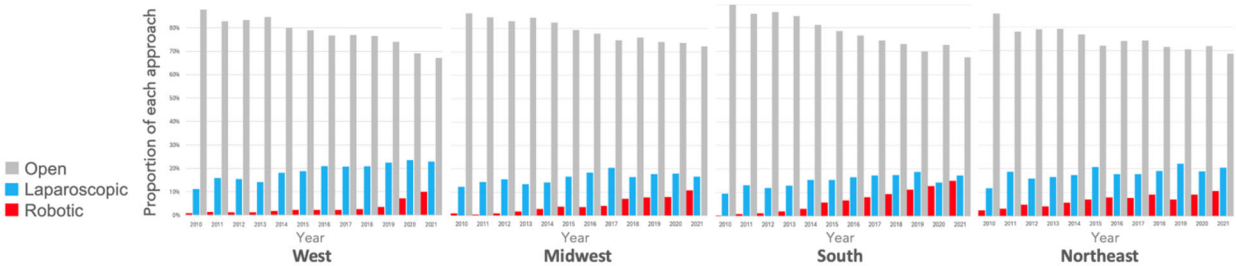
Architha Kannan, Laleh Foroutani, Jane Wang, June Peng, Kimberly Kirkwood, Kenzo Hirose, Eric Nakakura, Carlos Corvera, Ajay Maker, Adnan Alsedi, Mohamed Adam - University of California San Francisco

Minimally invasive pancreaticoduodenectomy (MIPD) is of increasing interest, yet regional and temporal adoption trends remain underexplored. This study examined adjusted adoption patterns of MIPD and open pancreaticoduodenectomy (PD) across the United States.

Methods: Adults with non-metastatic pancreatic adenocarcinoma undergoing PD were identified from the National Cancer Database (2010–2021). Descriptive statistics characterized demographic and clinical variables. Joinpoint regression with chi-square and t-tests assessed trends in open, laparoscopic, and robotic PD utilization. Average Annual Percent Change (AAPC) evaluated regional adoption rates.

Results: Among 53,704 patients, 77% underwent open, 16.9% laparoscopic, and 5.8% robotic PD. Laparoscopic PD was the predominant MIS approach across all regions. The West and Northeast had the highest laparoscopic proportions (19.38% and 18.32%), while the South had the lowest (15.36%, p<0.001). All regions showed increasing laparoscopic adoption, though the Midwest had the slowest growth (AAPC +2.6%) versus the West (+6.6%), South (+5.0%), and Northeast (+4.7%, p<0.001). For robotic PD, the Northeast had the highest proportion (6.65%), while the South, West, and Midwest showed the steepest growth (AAPC +35.6%, +25.5%, +21.3% vs. Northeast +13.0%, p<0.001). Open PD declined across all regions (AAPCs: West –2.4%, Midwest –1.5%, South –2.4%, Northeast –1.8%, p<0.001).

Conclusion: MIPD adoption varies significantly across US regions. Laparoscopic PD remains the dominant MIS approach, while robotic PD is growing fastest in the West and Midwest. These trends have implications for surgical training, resource allocation, and safe implementation of MIPD.



	West	Midwest	South	Northeast
Open (n, %)	6,625 (77.34%)	10,105 (78.76%)	16,149 (77.57%)	8,598 (74.84%)
AAPC (%)	−2.4	−1.5	−2.4	−1.8
Laparoscopic (n, %)	1,660 (19.38%)	2,110 (16.45%)	3,198 (15.36%)	2,106 (18.32%)
AAPC (%)	+6.6	+2.6	+5.0	+4.7
Robotic (n, %)	281 (3.28%)	611 (4.77%)	1,473 (7.08%)	788 (6.85%)
AAPC (%)	+25.5	+21.3	+35.6	+13.0

Abstract #14 | Clinical Science | Vascular Surgery

From Prevention to Intervention: A Quality Improvement Program for Peripheral Artery Disease at a Safety Net Hospital

Tripti Mathur, MBBS, Ariyan Tabesh, MD, Sahil Patel, MD, Britton Hart, NP, Camille Jackson, MD, Shahram Aarabi, MD - UCSF-East Bay Surgery Program

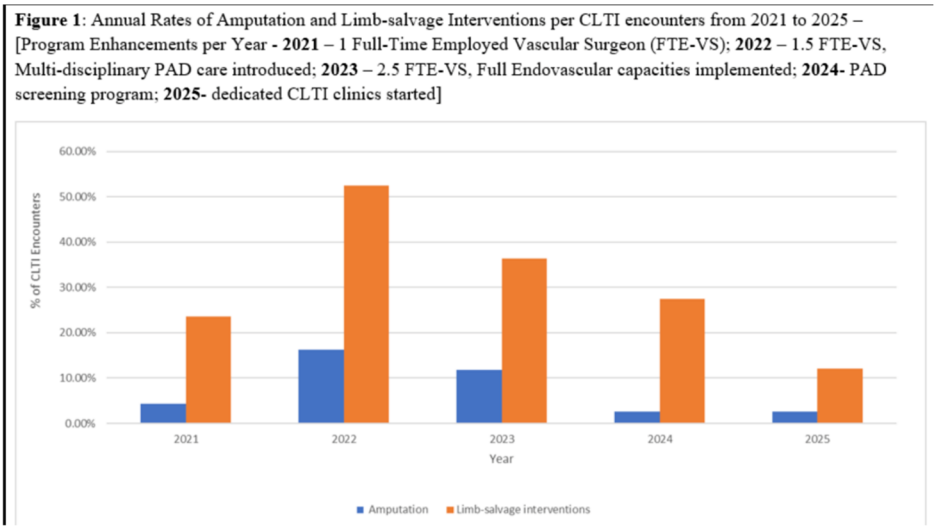
Objective:Peripheral Artery Disease (PAD) affects over 12 million Americans, disproportionately impacting underserved populations. Patients at safety-net hospitals (SNHs) frequently present with advanced diseases, including critical limb-threatening ischemia (CLTI), leading to high amputation rates (~25% annually). Despite its prevalence, PAD remains underdiagnosed. We hypothesize that a structured limb-salvage program enabling early identification and intervention reduces adverse limb events at an urban SNH.

Methods: In 2019, we launched a vascular surgery program focused on limb salvage, expanding from 0 full-time vascular surgeons pre-2019 to 2.5 by 2023. Program initiatives included multidisciplinary PAD care (2022), full endovascular capabilities (2023), EMR-based PAD registry stratifying patients as "At-Risk for PAD" or "CLTI" (2024). Primary outcomes include amputation and limb-salvage procedure rates.

Results:Our registry identified 47,876 At-Risk and 1,301 CLTI patients. Annual CLTI encounters increased from 208 (2021) to 922 (2025). Amputation rates peaked early during program implementation (16% in 2022) and declined to 2.6% by 2024-2025 (Figure 1). Limb-saving interventions increased from 49 (2021) to 111 (2025); the proportional rate declined, reflecting rapid denominator expansion from broader capture of earlier-stage disease rather than reduced limb-salvage delivery. Using registry data, we initiated dedicated CLTI surveillance clinics, community partnerships for at-risk screening, and obtained approval for 1.5 additional FTE-vascular surgeons in 2025.

Conclusion: A structured limb salvage program with increased vascular surgeon availability improved access and outcomes for PAD patients at a SNH. Future steps include expanding EMR-based PAD screening, implementing full-time vascular call coverage, and collaborating with other SNHs to enhance outcome tracking and standardize interventions.

Figure 1: Annual Rates of Amputation and Limb-salvage Interventions per CLTI encounters from 2021 to 2025 – [Program Enhancements per Year - **2021** – 1 Full-Time Employed Vascular Surgeon (FTE-VS); **2022** – 1.5 FTE-VS, Multi-disciplinary PAD care introduced; **2023** – 2.5 FTE-VS, Full Endovascular capacities implemented; **2024-** PAD screening program; **2025-** dedicated CLTI clinics started]



Abstract #15 | Clinical Science | Breast Surgery

Upgrade Rates of Fibroepithelial Lesions within a Large, Integrated Healthcare Delivery System

Wong-On-Wing, Annie, MD; Wade, Elijah, MPH; Dzubnar Barker, Jessica, MD; Kwak, Hyunjee, MD; Ritterman Weintraub, Miranda, PhD, MPH; Shim, Veronica, MD - University of California San Francisco, East Bay

Background

Fibroepithelial lesions (FEL) diagnosed via core needle biopsy (CNB) may represent benign fibroadenomas or rarely phyllodes tumors. 2025 American Society of Breast Surgeons (ASBrS) and Society of Breast Imaging (SBI) Guidelines do not recommend surgical excision for most FEL, unless there is suspicion for phyllodes, but there is a paucity of data on real-world upgrade rates.

Methods

This is a retrospective cohort study of 369 patients with an FEL on CNB between January 1, 2022 and December 31, 2022. Adults aged 18 and older with a FEL without atypia and no diagnosis of breast cancer within six months before or after their CNB were included. Pearson's chi-squared or Fisher's exact tests were used for categorical variables, and Wilcoxon-rank sum test or Kruskal-Wallis tests for continuous variables that were not normally distributed.

Results

A total of 119 of 369 patients (32%) underwent surgical excision of their FEL (Table 1). On CNB, 7 (5.9%) were diagnosed as benign phyllodes, 3 (2.5%) as borderline phyllodes, and 69 (58%) as indeterminate; there were no malignant phyllodes on CNB or final pathology. Among patients with fibroadenoma diagnosed on CNB, only 1 of 40 (2.5%) upgraded to borderline phyllodes on final pathology. In contrast, the 69 patients with indeterminate lesions, 19 (28%) upgraded to benign phyllodes and 8 (12%) upgraded to borderline phyllodes.

Conclusions

Our findings support the 2025 ASBrS and SBI Guidelines for the Management of Benign FEL recommendation for surgical excision of indeterminate FEL on CNB, while fibroadenomas may be safely observed.

Table 1: Core Biopsy Diagnosis by Excision Diagnosis - Patients Receiving Excisional Biopsy

Core Biopsy Pathologic Diagnosis	Overall (N = 119)	Fibroadenoma (n = 40)	Benign Phyllodes (n = 7)	Borderline Phyllodes (n = 3)	Unknown (n = 69)	p-value[1]
Excision Pathology, n (%)						<0.001
Fibroadenoma	73 (61)	32 (80)	1 (14)	0 (0)	40 (58)	
Benign Phyllodes	30 (25)	5 (13)	5 (71)	1 (33)	19 (28)	
Borderline Phyllodes	12 (10)	1 (2.5)	1 (14)	2 (67)	8 (12)	
Other	4 (3.4)	2 (5.0)	0 (0)	0 (0)	2 (2.9)	

[1]Fisher's exact test

Abstract #16 | Trauma System, Health Economics | Trauma/Critical Care

When Is It Cost-Effective to Implement a Whole Blood Program? A Cost-Effectiveness Analysis for Civilian Trauma Centers

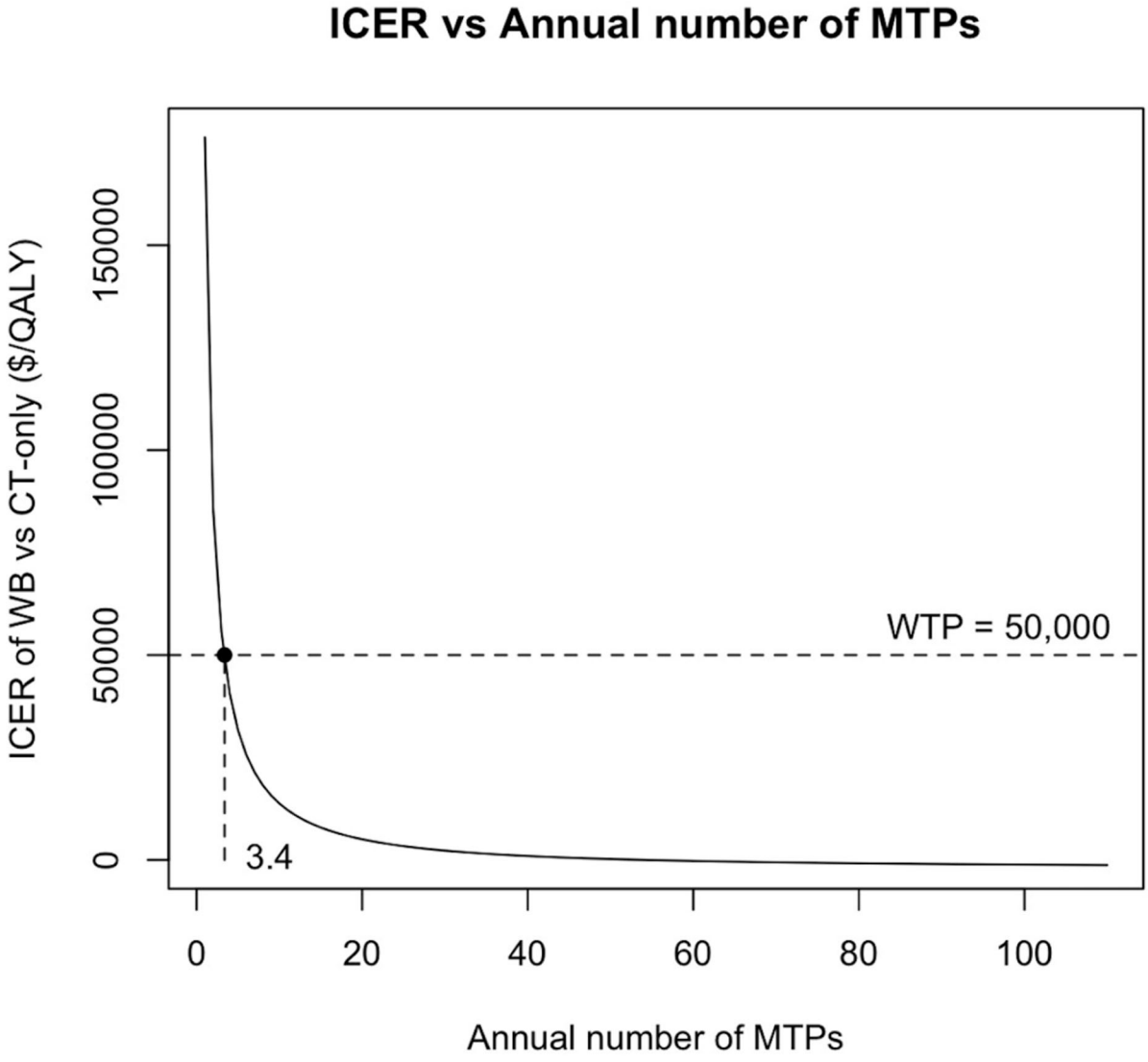
Meg Quint, Marissa B. Reitsma, Douglas K. Owens, Amogha Paleru, Joseph D. Forrester, Simeng Wang - Stanford University School of Medicine

Objectives:
Evidence suggests that integrating whole blood (WB) into massive transfusion protocol (MTP) may reduce mortality compared with component therapy (CT), although the cost-effectiveness of this practice is less clear. We conducted a cost-effectiveness analysis to identify the threshold trauma volume at which implementing a WB program becomes economically justified.

Method:
Data for 24-hour mortality and blood utilization, post-trauma quality of life, and healthcare costs were obtained from a published retrospective cohort study on WB, U.S. Life Tables, and Medical Expenditure Panel Survey, respectively. Anticipated costs of blood products, program initiation, and maintenance were obtained from our local blood bank. A Markov cohort model was used to evaluate health and economic consequences of WB program implementation compared to CT only. We performed a probabilistic threshold analysis, considering WB wastage as nonuse in 14 days modeled as a function of trauma volume, to determine minimum annual MTP volume for cost-effectiveness, assuming a willingness-to-pay of $50,000 per quality-adjusted life-year (QALY).

Results:
Based on our institutional parameters (98 MTPs/year, three WB wastage events/year, $100,000 initiation cost amortized over 5 years, $20,000 annual program cost), WB is cost-effective compared to CT (incremental cost-effectiveness ratio of $2345/QALY). Threshold analysis revealed that a minimum of four MTPs per year was required to prefer WB program implementation.

Discussion:
A WB program is cost-effective using our institutional parameters and would be so for many large trauma centers. We provide a generalizable modeling tool to evaluate the cost-effectiveness of WB programs using institution-specific parameters.


ICER vs Annual number of MTPs
ICER of WB vs CT-only ($/QALY)
0
50000
100000
150000
WTP = 50,000
3.4
0
20
40
60
80
100
Annual number of MTPs

Abstract #17 | Basic Science | General Surgery

Spheroid size is an important factor in supercooling preservation of hepatic spheroids.

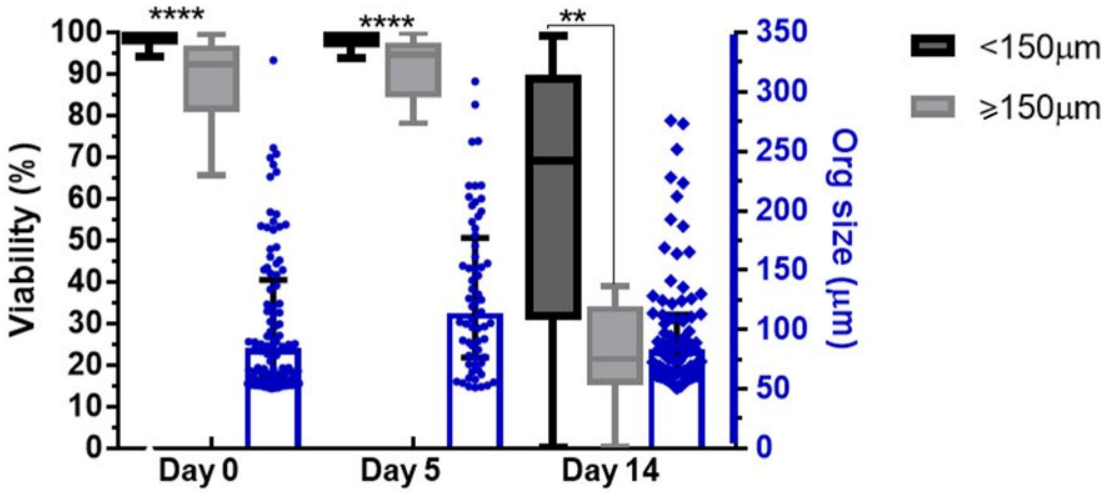
J.C. Reyna, A. Maida, Y. Weng, B. Rubinsky, and T.T. Chang - University of California San Francisco

Introduction: Induced pluripotent stem cell-derived liver organoids are promising as novel tissue-based therapy for severe liver dysfunction. Effective preservation approaches are needed for efficient biomanufacturing and distribution of these high-value biological products. Isochoric (constant volume) supercooling provides stable, non-freezing biopreservation at sub-zero temperatures and extends the duration of preservation compared to 4oC storage. We investigated the use of isochoric supercooling to preserve hepatic spheroids for up to 14 days.

Methods: Cells of a human hepatic cell line, HepG2, were cultured into spheroids. The spheroids were then transferred into cryovials containing a commercially available preservation solution and gradually cooled to -6oC in a custom isochoric device. After 5 or 14 days, hepatic spheroids were rewarmed, and viability was evaluated using live/dead staining and digital imaging analysis.

Results: After 5 days of isochoric supercooling preservation, hepatic spheroids exhibited viability (median 99%, IQR 100%-92%) comparable to pre-preservation controls (median 98%, IQR 100%-95%). Spheroid median viability decreased to 51% (IQR 86%-22%) at 14 days of preservation. We identified that 150µm spheroid size was a threshold which differentiated high- and low-viability groups at day 0 (98% vs 94%, $p<0.0001$), day 5 (99% vs 95%, $p<0.0001$), and at day 14 (69% vs. 21%, $p<0.01$).

Conclusion: Isochoric supercooling results in high viability of hepatic spheroids for up to 5 days of preservation, whereas viability becomes significantly reduced by day 14. Spheroid sizes <150µm is associated with improved viability across all time points, suggesting that controlling spheroid size may be a strategy to optimize supercooling preservation efficiency.



Abstract #18 | Clinical Science | General Surgery

Perioperative Characteristics Associated with No Inpatient Opioid Use Prior to Discharge After Inpatient General Surgery

Shraddha Pandey, BA; Caroline Erickson, MD; Tasce Bongiovanni, MD; Zhonghui Guan, MD; and Elizabeth C. Wick, MD, FACS - University of California, San Francisco

Background: Opioid overprescription is prevalent after surgery and can occur even when patients have tapered off opioids during their post-operative hospitalization. This study aims to identify perioperative factors associated with no opioid use 24 hours before discharge (non-use) to guide future innovations to avoid discharge overprescribing.

Methods: Retrospective cohort of adults undergoing general, hepatobiliary, or colorectal surgery with inpatient admission at an urban teaching hospital (January 2022-December 2025). Data were analyzed using Wilcoxon rank sum and Pearson's chi-squared tests.

Results: Among 7,183 patients, 2,963(41%) took no opioids 24 hours before discharge. This subgroup had a higher median age (62 years,IQR 46-72,$p<0.001$) but similar post-operative length-of-stay compared to the overall cohort(4 days,IQR 2.0-6.9). Opioid non-use before discharge was frequent after colorectal resection(63%), ileostomy/enterostomy(61%), and parathyroidectomy/thyroidectomy(53%)(all $p<0.05$). Among patients discharged post-operative days 1-2, 27-31% discontinued opioids inpatient. Among those discharged days 3-7(n=2522), non-use rates were 48-53% in minimally invasive cases, compared to 26-32% after open abdominal surgery($p<0.001$). Of these, 30%(877/2,963) were prescribed discharge opioids, with 10% receiving refills within 30 days. Procedures with frequent discharge prescription despite inpatient non-use included breast surgery(78-82%), bariatric surgery(78%), adrenalectomy(52%), and inguinal/femoral hernia repair(51%)($p<0.01$).

Discussion: A substantial proportion of patients were discharged with opioids despite non-use inpatient, across a range of procedure types and lengths-of-stay. The electronic health record could potentially enable a patient-centered approach to post-discharge opioid prescribing, where discharge prescriptions are informed by inpatient utilization. Further study is needed to determine whether this approach would benefit these patients by minimizing opioid exposure during post-surgical recovery.

Abstract #19 | Clinical Science | General Surgery

Understanding the Surgical Work Burden: Workload and Perceptions from a National Survey of Surgeons

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Objective: To quantify true surgeon workload and evaluate the relationship of workload to perceptions of effort. Surgeons' work involves more than clinical care. Institutional staffing models often underestimate true workload, especially uncompensated after-hours work. No consensus exists on what constitutes a surgical full-time equivalent (FTE), with limited prior research.

Methods:
An online, anonymous survey was distributed nationally in 2024. Using univariate, multivariate, and machine learning analyses, clinical and non-clinical cumulative workloads were calculated and analyzed along with perceived workload burden by gender, years in practice, and subspecialty

Results:
5,329 surgeons (21.2% response) completed the survey, including 3,330 answering work-effort questions. Median workload was 68.1 hours/week during regular work hours, with additional five days/week during off-time. Among surgeons reporting workload perceptions (N = 1,177), 61% described their workload as "too much." Independent of hours worked, higher odds of perceiving excessive workload were observed among female surgeons, those with 6–10 or 20–29 years in practice, and surgeons in pediatric surgery, urology, and plastic surgery. Decision-tree machine-learning analysis identified career stage as the strongest predictor of perceived overwork, followed by cumulative weekly hours, with thresholds at 66 and 46 hours/week.

Conclusions:
Surgical workloads vary widely, but are uniformly high. Specific factors such as gender, years in practice, and being in specific subspecialties independently increased the risk of feeling overworked. Aligning workload with tasks requiring surgical expertise and considering hour-based workload thresholds may reduce perceptions of overwork while potentially necessitating expansion of the surgical workforce.

Table 1: Characteristics and demographics across quintiles of cumulative workload during regular work hours.

Quintile characteristics (N=666 for each Quintile)	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Quintile Bin Ranges (hrs/week)	1.8 - 40.5	40.5 - 59.1	59.2 - 76.4	76.4 - 103.6	103.8 - 385.4
Median work burden (hrs/week) with IQR	27.6 (18.4 - 35)	50.6 (45.1 - 54.8)	68.1 (63.8 - 71.9)	87.5 (81.3 - 94.8)	135.3 (116.5 - 166.8)
Gender (N = 3261) (p=0.4)					
Male (2140)	426 (19.9%)	408 (19.1%)	435 (20.3%)	428 (20.0%)	443 (20.7%)
Female (1002)	200 (20.0%)	216 (21.6%)	196 (19.6%)	209 (20.9%)	181 (18.1%)
Other (119)	22 (18.5%)	24 (20.2%)	24 (20.2%)	18 (15.1%)	31 (26.1%)
Practice Years (N = 3320) (p<0.001)					
0–5 years (394)	52 (12.6%)	76 (18.4%)	98 (23.7%)	90 (21.8%)	78 (18.9%)
6–10 years (465)	45 (9.7%)	94 (20.2%)	107 (23.0%)	117 (25.2%)	102 (22.0%)
11–19 years (720)	129 (17.8%)	150 (20.7%)	147 (20.3%)	159 (21.9%)	135 (18.6%)
20–29 years (947)	173 (18.8%)	196 (21.3%)	185 (20.1%)	193 (21.0%)	200 (21.7%)
30+ years (794)	266 (33.5%)	145 (18.3%)	129 (16.3%)	105 (13.2%)	149 (18.8%)
Specialty (N = 3324) (p<0.001)					
Critical Care/Acute/Trauma Surgery (571)	68 (11.9%)	88 (15.4%)	125 (21.9%)	**145 (25.4%)**	**145 (25.4%)**
General Surgery (509)	78 (15.3%)	99 (19.4%)	**111 (21.8%)**	**114 (22.4%)**	107 (21.0%)
Orthopedic Surgery (314)	**94 (29.9%)**	**84 (26.8%)**	73 (23.2%)	39 (12.4%)	24 (7.6%)
Colorectal Surgery (210)	44 (21.0%)	**48 (22.9%)**	**45 (21.4%)**	39 (18.6%)	34 (16.2%)
Vascular Surgery (198)	28 (14.1%)	35 (17.7%)	39 (19.7%)	**49 (24.7%)**	**47 (23.7%)**
Plastic Surgery (181)	**57 (31.5%)**	**40 (22.1%)**	32 (17.7%)	25 (13.8%)	27 (14.9%)
MIS/Bariatric Surgery (165)	**35 (21.2%)**	28 (17.0%)	**39 (23.6%)**	34 (20.6%)	29 (17.6%)
Breast Surgery (161)	**47 (29.2%)**	**43 (26.7%)**	27 (16.8%)	27 (16.8%)	17 (10.6%)
Surgical Oncology (151)	**36 (23.8%)**	**34 (22.5%)**	26 (17.2%)	30 (19.9%)	25 (16.6%)
Cardiothoracic Surgery (146)	14 (9.6%)	13 (8.9%)	12 (8.2%)	**29 (19.9%)**	**78 (53.4%)**
Pediatric Surgery (136)	19 (14.0%)	17 (12.5%)	**45 (33.1%)**	**33 (24.3%)**	22 (16.2%)
Otolaryngology (116)	21 (18.1%)	**43 (37.1%)**	**22 (19.0%)**	17 (14.7%)	13 (11.2%)
Neurosurgery (109)	21 (19.3%)	13 (11.9%)	**23 (21.1%)**	21 (19.3%)	**31 (28.4%)**
Endocrine Surgery (69)	**18 (26.1%)**	**25 (36.2%)**	13 (18.8%)	8 (11.6%)	5 (7.2%)
Other (68)	**27 (39.7%)**	10 (14.7%)	9 (13.2%)	10 (14.7%)	**12 (17.6%)**
Urology (56)	**14 (25.0%)**	**17 (30.4%)**	7 (12.5%)	12 (21.4%)	6 (10.7%)
Transplant Surgery (46)	6 (13.0%)	4 (8.7%)	3 (6.5%)	**9 (19.6%)**	**24 (52.2%)**
Ophthalmology (42)	**18 (42.9%)**	**7 (16.7%)**	6 (14.3%)	5 (11.9%)	6 (14.3%)
Gynecology (33)	**11 (33.3%)**	**8 (24.2%)**	4 (12.1%)	7 (21.2%)	3 (9.1%)
OMFS (25)	**6 (24.0%)**	4 (16.0%)	2 (8.0%)	7 (28.0%)	**6 (24.0%)**
Gynecologic Oncology (14)	2 (14.3%)	**4 (28.6%)**	3 (21.4%)	**4 (28.6%)**	1 (7.1%)
Burn Surgery (4)	0 (0.0%)	1 (25.0%)	0 (0.0%)	1 (25.0%)	**2 (50.0%)**

Bolded values indicate the top two quintiles in which the highest percentage of each subspecialty was represented.
Individual category denominators differ since no question was mandatory to complete the survey.

Abstract #20 | Quality Improvement | General Surgery

Standardizing Night Shift Resident-Nurse Communication

Dong Hur, Tiffany Yue, Mindy Su, Rachael Stottlemyre, Zeyi Zhou, Amin Etemad, Aussama Nassar - Stanford General Surgery

Objective:
To quantify the communication burden of night surgical residents and evaluate an intervention aimed at reducing nonurgent messaging, improving triage of high-acuity concerns, and enhancing continuity of care.

Methods:
We implemented a multicomponent protocol including (1) standardization of anticipatory nighttime orders by day teams, (2) structured nurse-to-resident communication framework, and (3) checklist for night resident responsibilities. Voalte messages exchanged between night nurses and residents across multiple general surgery services were collected before and after implementation. Message volume by hour was plotted and mean nightly message volume per resident was compared using an unpaired t test.

Results:
Mean nightly message volume per resident decreased after implementation but did not reach statistical significance (208 vs 226 messages; P = .13). Message distribution was bimodal, peaking at 8–9 PM and 4–5 AM. Response times were longest during peak messaging hours, with variability up to 70 minutes (SD).

Conclusions:
Night surgical residents manage high volumes of cross-service communication, particularly during early evening hours. Peak messaging periods correlate with delayed response times and may contribute alert fatigue and impaired triage. Standardized anticipatory orders, structured communication, and resident checklists may reduce preventable nighttime interruptions and allow prioritization of high-acuity concerns.