

**ZSFG CHIEF OF STAFF REPORT**  
**Presented to the JCC-ZSFG on January 25, 2022**  
**January 2022 MEC Meeting**

**CLINICAL SERVICE REPORT:**

Department of Surgery Biennial Report – Joseph Cuschieri, MD, Interim Chief

1. Mission – The Department’s overall mission is to provide dedicated care to the citizens of San Francisco, along with an outstanding training environment to its learners which include the residents, nurses, nurse practitioners, and medical students.
2. Organization and People
  - a. Faculty Members
    - Changes in the faculty membership were noted that included Dr. Cuschieri’s appointment as Interim Chief effective September 1, 2021.
    - The retirements of Drs. Bob Mackersie and Peggy Knudson in July 2021 were relayed, and their revolutionary contributions to trauma care nationally were acknowledged.
    - There are 6 in-residence faculty, 11 clinical faculty, and 27 courtesy faculty.
    - Clinical data is used in the reappointment process. The areas considered include clinical care, overall medical knowledge (board certification and attendance of grand rounds), and professionalism (review UOs and counselling). Also, the importance of completion of operative notes and signing of final operative notes in a timely fashion was emphasized;
  - b. Physician Leadership/Hospital Committee Participation:
    - Physician Leadership at ZSFG - the diverse leadership comprises of individuals with critical roles in the Department’s processes.
    - Hospital Committee Participation – The faculty members serve in various hospital committees which include Multidisciplinary Trauma Peer Review Committee, Cancer Committee, OR Committee, Critical Care Committee, and others.
    - Physician Leadership at UCSF – The leaders for Education (Dr. Adnan Alseidi); DEI (Diversity, Equity and Inclusion) and Surgical Critical Care (Dr. Andre Campbell); and Plastic Surgery Residency Program (Dr. Scott Hansen) were noted.
    - Physician Leadership (National Roles) – Many play key leadership roles in a number of prestigious committees in surgical associations, broad medical associations, and NIH. The following were recognized:
      - Dr. Adnan Alseidi – President of the Association of Surgical Education and President-Elect of the Fellowship Council
      - Dr. Andre Campbell – President-Elect of Black Academic Surgeons
  - c. Honors/Awards – A number of faculty members have had numerous honors and awards for both patient care and education. Many have been granted teaching education awards multiple times, highlighting the Department’s dedication to surgical education and education overall.
  - d. Communication to Faculty – Communication is done through email PRN, daily emails for on-service group, and weekly faculty meetings. A critical area for improvement in communication is to centralize location of faculty offices which are currently located in multiple buildings.
  - e. Key Findings of Satisfaction Surveys (2021)– The following results indicate areas of improvement.

- Burnout – Seventy-five percent (75%) of faculty felt burnout and posted the highest percentage among all surveyed departments.
  - Leadership Support/Leadership Seek Input – Thirty-eight percent (38%) of faculty felt listened to and posted the lowest percentage among surveyed departments.
  - After-Hours EMR – Only 25% of faculty did not bring EMR work at home.
  - Work Well Together – Only 38% felt that the staff and providers worked well together. However, about 90% felt excellent care was provided as a group.
  - Mentor – Only 50% of faculty thought they had good mentorship.
- f. Surgical Education -The faculty members are committed to providing excellent education, marked by numerous teaching awards as aforementioned.
- Surgical education is categorized as follows: Trauma/General Surgery, Plastic Surgery, Vascular Surgery, SICU, and other ZSFG Services with General Surgery residents (Critical Care, Neurosurgery, Gastroenterology, Plastics). There are over 80 residents every year who rotate through these services.
  - There are 2 core medical students' rotations to gain further education and experience on surgical services: Surgery 110 (third-year rotation on Trauma Surgical Service) and Surgery 140 (fourth-year students).
  - There are 2 core fellowships: Acute Care Service (ACS) fellowship and Surgical Critical Care (SCC) fellowship. ACS fellowship is a one-year program which follows the one-year SCC fellowship. The Department is also a site for a Vascular fellowship and Plastic Surgery fellowship.
  - The scope of education and clinical experience encompasses Trauma/Emergency General Surgery, "Elective" General Surgery (breast, oncology, and others), SICU, Vascular, and Plastic Surgery (hand, gender affirmation, and craniofacial).
  - New developments in surgical education were relayed which include the new ACS fellowship, new Vascular Surgery fellows, new R4 rotation in SICU, amongst others.
3. Scope of the Clinical Services
- a. Core Specialty Care – This include Trauma Surgery, Critical Care, Emergency General Surgery, Plastic Surgery, and Vascular Surgery.
  - b. Community Support – The Wraparound Program was developed at ZSFG and is a national standard for how to work with victims of gun violence. Other institutions have designed similar programs.
  - c. Surgical Subspecialty Care – This include "Elective" General Surgery, Breast, Hepatobiliary, Surgical Oncology, Thoracic, and Colorectal.
  - d. Diagnostic Service – The Vascular Lab provides diagnostic service.
  - e. Hospital-based and Ambulatory-based Clinical Services – The Department works throughout the hospital within the clinical setting at ED, Inpatient, OR, Vascular Lab, and the Wraparound Program.
  - f. New developments in clinical services were relayed. These include a culture of "yes" to work with other Services to provide highest level of care; EGS OR time; focus on surgical oncology and colorectal surgery; ongoing reorganization of Trauma Program; and others.
  - g. Volume and Metrics
    - Ambulatory Volume- In 2020, there was a marked reduction in the overall clinic volume. In 2021, the volume increased with about 2.5 K patients in General Surgery and 3.5 – 4 K patients in Plastics.

- Division of Surgery Clinic: Overview – Most patients were outpatient general surgery patients. The average time from referral to appointment can range between 20 to 40 days (different from TNAA results).
- Outpatient General Surgery Clinic Metrics – Though clinics were relatively busy in 2021, the no-show rate was nearly 25% which can be improved. The reduction of this no-show rate at any significant amount will truly increase patient volume.
- Outpatient Plastic Surgery and Outpatient Vascular Surgery Clinic Metrics - The  $\approx$  25% no-show rate was also seen in other clinics, including Plastic Surgery and Vascular Surgery.
- Outpatient Breast Surgery Clinic Metrics – The Breast Clinic had a relatively no-show rate of 13% which reflects the multidisciplinary approach to breast surgery care, including hematology, oncology, radiation. All are in one location which facilitates high standard of care for women with breast cancer.
- Outpatient Colorectal Surgery Clinic Metrics – This service is a small practice which continues to grow and had a 25% no-show rate as well.
- Inpatient Volume – The volume continues to grow after the 2020 initial COVID surge. The number of initial hospitalizations was followed by substantial subsequent hospital visits.
- Operative Volumes – Emergency general surgery practice continues to grow annually with nearly 700 procedures in 2021. The trauma cases decreased in 2020 but posted substantial growth in 2021.
- Operative Volume for Department of Surgery – There are  $\approx$  2.5 K cases annually. The volume decreased to  $< 2$  K in 2020 but grew in 2021.
- General Surgery Operative Metrics – The majority pertains to exploratory laparotomy with fair number of cholecystectomy, appendectomy, and inguinal/femoral hernias.
- Plastic Surgery Operative Metrics – There were nearly 1K cases performed over the last three years with an annual average of 400 cases.
- Vascular Diagnostic Studies – The reduction in 2020 was followed by increased volume in 2021.
- Trauma Surgery – The ZSFG Trauma Center is recognized nationally due to coordination with other departments.
  - Estimated 2021 volume was 2,164 trauma admissions.
  - Activations (900 full trauma activations) were resource-consuming with employment of ER personnel, blood bank services, respiratory therapy, anesthesia and trauma service.
  - As for injury type, there were 83.2% blunt cases and 16.2% penetrating cases.
  - Most were male patients.
  - An increasing growth of cases among the geriatric population was noted ( 23% of patients  $> 65$  years ) which is an area of ongoing intense evaluation for optimal care. In 2010, this population comprised only 10% of patient cases. Continued growth is expected in the future.
  - Race/Ethnicity – In 2020, 40% of patients were Caucasians which did not reflect the Hispanic race/ethnicity comprising majority of SF population. This could potentially due to patients who were not permanent SF residents.
- Wraparound Program
  - Client Demographics – Over the last two years, there was a marked change in the renowned Wraparound program because of telehealth which is a difficult way of

providing peer to peer communication. This critical communication is the best way in presenting reduction of recidivism and appropriate reintegration into society.

- Pragmatic Impact – Along with reintegration to society for job growth, the program provides numerous supportive care such as assistance with legal needs.

4. Process Improvement – The Division of Surgery Process Improvement is robust and continues to grow with its leaders, managers, and metrics evaluated.

a. True North Drivers and Corresponding Measures Needing Improvements:

- Quality - Early Notification to ED of Shock Trauma Patients; Documentation of Timely Response of Trauma Attending to 900 TTA (Trauma Team Activation)
- Equity - Implementation of the TQIP Palliative Care Bundle; Implementation of IPV (Intimate Partner Violence) Screening
- Patient Flow/Safety/Quality - Non-Primary Admission Completion of Tertiary Survey within 24 Hours

b. PIPS – Trauma

- Trauma Deaths – There has been great outcome with only 1 non-preventable case in 2021 Q1 and Q2.
- TQIP Reports (Fall 2021) – The following reports use risk-adjusted data collected by ACS Committee on Trauma for Levels 1 and 2 trauma centers in the country.
  - Risk-Adjusted Mortality by Cohort - ZSFG has an overall (all patients) .83 mortality rate which is lower than expected.
  - Risk-Adjusted Major Hospital Events by Cohort – For risk-adjusted complications, ZSFG has higher overall mortality rate of 1.28
  - Risk-Adjusted Specific Hospital Events by Cohort – The areas that can potentially improve are pulmonary embolism and surgical site infection. Various ongoing efforts by departments are addressing these areas.

c. Resuscitation of Hemorrhagic Shock – As for 1:1 transfusion, the 80% rate at ZSFG is much higher than the national average of 60%.

d. Management of Orthopedic and Spine Injuries

- Antibiotic Therapy- ZSFG is at 30 minutes for initiation which is below the guideline of 1 hour.
- Operation of Open Fractures – The orthopedic service operates on open fractures in a relatively fast manner, i.e., within 5 hours of patient presentation.
- Decompression of Patients with Spinal Injuries - The hospital's time of 20 hours is below the national standard.

e. Monitoring of Traumatic Brain Injury – ZSFG's complication rate is very low. Overall, more than 40% of patients are receiving proper and robust monitoring.

f. Documentation of Timely Response of Trauma Attending to 900 TTAs- The ideal benchmark is at 80%. The rate was at 82% in August 2021.

g. Trauma Attending/Fellow Response Time for Shock Trauma Patients (Jan - June 2021)- The timely response (before or within 1 minute of patient arrival) was at 44%, and the response within 2 – 5 minutes of patient arrival was at 44%. These responses were critical as out of 54 patients, 16 cases required immediate operative intervention and 15 cases expired.

h. IPV Program – This is a resident-led initiative that provides education to all learners, highlighting that 1 in 4 women and 1 in 10 men experience IPV during their lifetime. Since the program's inception in June 2020, there have been 40-60 IPV evaluations per month by residents and learners, along with staff from emergency room and social work.

- i. CY 2020 ZSFG Quality Data Reporting Regulatory Requirements – The need to work with CMS on how to drive programs was noted for reimbursement and (more importantly) for provision of possible best care.
    - OR Efficiency – The internal benchmark is 80% which is a high benchmark of OR utilization. General Surgery is at 86%. Also, Plastic Surgery and Vascular Surgery post rates close to the 80% benchmark. Other areas have rates reflecting the quick use of operative time.
    - Division of Surgery Clinic:TNAA – For Colorectal Surgery, the TNAA was brought down from 77 to 21. For Vascular Surgery, the TNAA was brought down from 33 to 18.
  - j. PIPS – Colon SSI – The standardized infection ratio at ZSFG was brought down from 2.57 in 2017 to 1.39 in 2018.
  - k. Other areas of focus are the following : (1) Inguinal Hernia Operative Metrics, (2) Appendectomy Operative Metrics, and (3) Cholecystectomy Operative Metrics.
5. Research – A number of investigators perform high caliber research funded by DoD and NIH.
6. RVUs (Relative Value Units)- The Department has about 70K Surgery Work RVUs for all divisions.
7. Financial Report – The Department has been relatively profitable with almost \$4M of annual revenues and lower projected costs. Most areas have continuing revenue growth. However, Critical Care billing decreased and is an area of focus for next several months. The overall reserve is below \$7M which will be used for recruitment to further advance programs.
8. Summary
- a. Strengths – These include nationally recognized faculty; dedication to surgical education; and bright and resilient junior faculty.
  - b. Opportunities for Improvement – These pertain to underlying guidelines; inconsistent leadership; and balance of service and education.
  - c. Goals – These include improving collegiality, empowering junior faculty, working on evidence-based practices, and further advancement of collaborative research.