

**ZSFG CHIEF OF STAFF REPORT**  
**Presented to the JCC-ZSFG on October 26, 2021**  
**October 2021 MEC Meeting**

**A. Clinical Documentation Integrity (CDI) Updates – Aaron Harries, MD, CDI Director Physician Advisor**  
Dr. Harries and his team relayed updates on CDI for the past year. The following were highlights of the report:

1. Accomplishments

a. 2020 Goals – The following goals were met, with 2 of them surpassing goals:

- Conduct 1 CDI educational session for 10 major service lines – Nine CDI presentations were done for each major service line.
- Improve CDI query response rate (positive response rate) – The goal was surpassed. The goal was 80% response rate with 90% query agreement (industry standard). In 2021, both response and agreement rates are over 90%. The success was attributed to CDI education meetings with each faculty services which led to better understanding of CDI and how to answer queries. Also, use of EPIC helped in the improvement.
- Improve CMI (Case Mix Index) – The goal was surpassed with improved CMI for 7 major service lines. For ZSFG, the quarterly CMI slowly increased over the last several years to 1.56. Thus, a steady increase has transpired which is an improvement particularly considering the challenges brought about by the pandemic for last 18 months.  
Also, the mortality index (observed vs expected number of deaths) showed significant improvement over the last quarters.

b. 2021 Goals – The following goals were established, and results were noted as follows:

- Increase number of CDI reviewers (2 previously) – This goal was met. Last year, the 2 reviewers completed 77% of “Medicare” ZSFG inpatient admits which represent 23% of all ZSFG admits. Beginning October 2021, there are 4 CDI reviewers. The target is to have 6 reviewers in January 2022 who will hopefully review 100% Medicare charts that represent about 75% of all ZSFG inpatient admits.
- Expand CDI efforts into Patient Safety Indicator (PSI)-90 Safety Quality Metrics (Hospital Star Ratings) - This goal was achieved with in-depth monthly review of PSI-90 measures, marked by improved accuracy in reporting. The improvement will hopefully translate to increased hospital star ratings in 1-2 years.
- Continue CDI education sessions at specialty faculty meetings – This goal was accomplished with 9 major service lines. The second round of sessions will start in October 2021. There are 2 sessions for the week of October 11<sup>th</sup> with Internal Medicine and Trauma Surgery.
- EPIC CDI functionality improvement (Attending note template w/ CDI dx) – This goal was partially met with an extremely successful pilot Cardiology Attending Epic note template (including specific CDI diagnosis and language) launched on April 1, 2021. The Cardiology’s CDI inquiries reduced by 50%. This goal will be expanded to other service lines that would like to partner with CDI.
- More granular CDI data via Epic (individual provider data by CMI & Mortality Index) – This goal has not been fully met. There has been much work on the back end to clean up data that goes into Epic. The plan is to accomplish this goal in 2022.

2. CDI Query Financial Impact – In 2020/2021 YTD, the CDI queries changed the potential reimbursement by \$4.7M (12-month total from July 2020-June 2021), a 3.7 increase over the last 2 years (\$1.2M in 2018 and \$3.4M in 2019).

3. CDI 2022 Plan includes continuation of 2021 goals, along with use of new technology with AI smart language to scan charts in real time for CDI opportunities.

Dr. Harries asked for the following: (1) continued support from MEC and Department Chairs/Chiefs, (2) continued partnership with departmental faculty CDI education/data presentations, and (3) potential partnership on Epic attending note templates with CDI diagnoses.

## B. Orthopaedic Surgery Service Report – Ted Miclau, MD, Chief

Report highlights include:

The Service's mission is to mend the injured, inspire innovators, and empower leaders to restore lives. The integrated clinical network wherein trauma services are provided through ZSFG is a central hub. It also provides trauma services throughout the Bay Area. The Service's vision is to provide the best service as an interdisciplinary team which is recognized nationally and internationally. The Orthopaedic Trauma Institute UCSF + ZSFG (OTI) has 4 main areas: (1) clinical, (2) education, (3) research, and (4) outreach.

### 1. Scope of Clinical Service

- a. Service Scope of Practice - The scope of practice includes orthopaedics, podiatry, rehabilitation, and orthotics and prosthetics. The Service manages all cases with some assistance from UCSF on areas such as oncology. The call coverage, along with specialty practices, is provided entirely by the Service's staff.
- b. OTI's Clinical Scope – OTI provides additional surgical volume and financial support to the following:
  - UCSF Orthopaedic Institute/ UCSF Parnassus Campus
  - San Jose Medical Center (stand-alone level 2 trauma center)
  - Laguna Honda Hospital
- c. Orthopaedic Surgery Clinical Service - For attendings, there are 14 full-time ortho faculty, 1 full-time podiatry faculty, and 3 full-time rehabilitation faculty. There are 5 research faculty and 2 fellows. As for residents, there are 2 teams, an Emergency Medicine resident, and 3 interns. Also, there is a large cohort of students.
  - Faculty
    - Full-time Clinical Faculty- Most of them are trauma fellowship trained with the group having the largest trauma fellowship trained faculty in the United States. Many of them have done a second fellowship; the group is also the largest trauma fellowship trained faculty with second fellowship in most US Orthopaedic departments. At ZSFG, two fellowships are needed to cover trauma and another sub-specialty at the highest level to provide proper community standard of care. Also, there are 2 hand surgeons and a physiatry group.
    - Part-time Faculty – Support is supplemented with part-time faculty in spine, foot and ankle, pediatrics, podiatry, and tumor.
  - Patient Care
    - Patient Care: Surgical Procedures – Over the last several years, the Service has been continually doing about a third of the total OR cases and total OR Minutes.
    - Patient Care Productivity: Outpatient Orthopaedic Clinics – The clinic productivity has been relatively stable but decreased in 2019-2020 and 2020-2021 due to EPIC and COVID-19 pandemic. The Service is still trying to recover from the decline in productivity. The Service offers the largest sub-specialty practice for surgery outside of combined Ophthalmology/Optomety services.
    - Call Services – General call services operate 24hrs/365 days. For Ortho Hand call service, call coverage is shared 50-50 with plastics. Likewise, the call coverage for Ortho Spine call service is shared 50-50 with neurosurgery. Both Ortho Hand and Ortho Spine services are now integrated services that work well together in a combined clinic.
  - Podiatry Service – This provides consultation services in ED, inpatient, and outpatient centers. Outpatient care includes foot orthotics and functional limb service support. Also, the podiatry service is very active in the OR. Moreover, there is teaching program for both students (Samuel Merritt College) and residents (VA).
    - Patient Care Productivity: Outpatient Podiatry Clinics – The clinics have been relatively stable. In 2020-2021, the number was low which was primarily due to the pandemic.
    - Podiatry Service Challenges – There is a single podiatry service provider with another part-time provider. This arrangement has become problematic with the outpatient backlog from the pandemic. The reduction of ORs resulted in loss of OR time, leading to increasing elective case backlogs.

- Physiatry: In-Patient and Outpatient Services – This group treats all rehabilitation-related diagnoses. Also, the staff integrates with the neurosurgery and neurology services, as well as with the orthopaedic services. Other services include facilitation of prosthetic training, provision of consultations for Acute and SNF (Skilled Nursing Facility), rehab services, amongst others.
    - Physiatry: Clinics/Procedures – Services are provided in different areas throughout the hospital.
    - Physiatry Service Challenges – Over the last year, the biggest issues have been OR access and pandemic-stimulated items. There are backlogs in the clinic, OR access, injection treatments, and EMG studies.
  - ZSFG Orthotics and Prosthetics Service – This group provides many services used by the hospital. There are over 100 patients/week. It is the only service in SF that performs prosthetic care. Also, it provides services at LHH/3M clinics, monthly peer to peer programs for amputees, and other educational services for in-house providers.
  - Orthopaedic Surgery: PIPS – The following were noted:
    - Driver: Quality/Safety on Surgical Joint Infections – They have been relatively stable with acceptable community standard numbers. The ideal scenario is zero cases, but there are inevitably 1-2 cases per year which end up catastrophic. Action items include education, sobriety, and multiple pre-OR visits with patients.
    - Driver: Care Experience with First Case On Time Starts - This has been a major focus in the hospital. It was a resident project, and there were improvements for the past year.
    - Watch: Care Experience with TNAA, turnover time, and block utilization; Safety with Mortality Prevention; Equity with OR wait times for arthroplasty; and Developing People with people assuming leadership roles and obtaining leadership education
  - Orthopaedic Surgery: TNAA – Three services (i.e., arthroplasty, orthopedics hand, physiatry) have had issues which primarily started due to the pandemic.
2. Faculty
    - a. Faculty Committee Participation (ZSFG) – Faculty members participate in various committees across the board in both large and small hospital committees.
    - b. Faculty Leadership Positions – There are internal leadership positions that are currently being expanded with the service becoming large.
  3. Finances
    - a. Ortho & Podiatry Service RVU Production - The finances have been relatively steady with similar 2020-2021 and 2019-2020 figures. The Service performed remarkably well in face of issues with the pandemic and patient access to OR. Also, elective inpatient admissions were limited during the pandemic. Actions items include use of heat room (a high efficiency arthroplasty team room) with the goal to do more arthroplasty cases on a given day to mitigate the backlog. Though probably not sufficient, the heat room will improve situation.
    - b. ZSFG Ortho Payor Mix – The payor mix has been consistent over the years and reflects what other surgical services that provide trauma have as well. A larger portion of insurance patients are from ED for trauma service care. There is a decent number of Managed Care and Medicare/Medi-Cal cases.
    - c. Other Collections (per RVU/Ratio) – The ratio has also remained stable over the years.
  4. Education
    - a. ZSFG/OTI Orthopaedic Surgery: Resident Rotation – The UCSF Resident Program continues to be a “top 10” choice with ZSFG rotation as a primary reason. There is also much involvement in residency education through training facility. All anatomy sessions and core surgical facility training are now run through surgical training facility at ZSFG. Awards received over the past few years were noted.
    - b. Department of Orthopaedic Surgery: Weekly Conferences – There is an extensive weekly conference schedule. This includes daily consult/trauma case, interdisciplinary rounds, pre and post-op indications conferences, and strong trauma teaching conferences.
    - c. Medical Student Training – There is also much involvement in medical school teaching at ZSFG and trauma teaching at UCSF.
    - d. 15<sup>th</sup> Annual Int'l SF Orthopaedic Trauma Course- The Course, the largest in the country, recently finished. This year was challenging with COVID-19 precautionary measures; the Course was the first post-pandemic large CME course. There were about 360 attendees with 400 participants as typical

volume. There was some lost participation from some countries and from California, but event was successful.

- e. Surgical Training Center – There are multiple sponsored courses for a variety of services. At least a third of the courses are free. Any charges are invested back into the facility. A list of the different services that use the training facility was presented. As mentioned, there is a large education program for all trainings across the board. There was also a course relating to American College of Surgeons.
  - f. UCSF Orthopaedic Residency Core Surgical Curriculum – This is the only one in the country. Each sub-specialty covers 3 core procedures which are taught to residents (seniors and juniors) using cadavers. The curriculum runs for 2 years.
  - g. OTI Junior Academy- The Academy annually receives sponsorship from the Hearts Program. Last year, 14 Bay Area High Schools across 4 school districts participated. From 2012-2020, 131 students have been accepted. Many of the students pursue medical career with 55 of 59 alumni pursued/pursuing a STEM Degree. These students are from under-resourced environments. It was noted that the person running the training facility is a graduate of the Program.
5. Research
- a. Contracts and Grants (Direct Costs Only)- Research activities are encompassing. NIH funding is in the top 15 for Orthopaedic Surgery in the country. Orthopaedics at UCSF has been ranked #1 twice and #2 once for the past 3 years.
  - b. Research Facilities
    - Laboratory for Skeletal Regeneration- There are 7 PIs who largely work on musculoskeletal injury and repair, along with craniofacial development. There is collaboration with different services such as Neurosurgery and Anesthesia. There are various funding sources.
    - OTI Biomedical Engineering Lab – The Lab was recently funded by the Department of Defense (DoD). Research work includes sensors and 3-D printers. The latter supports inpatient care with some modelling used.
    - Clinical Research Center – The Center is extremely active and recognized as one of the top research centers in the country. The Center is part of the METRC Collaborators that include major trauma centers in the country. Funding is from DoD and NIH.
    - Surgical Training Facility
6. Outreach – The Institute for Global Orthopaedics and Traumatology (IGOT), a musculoskeletal care partnerships, is celebrating this year its 15<sup>th</sup> year of operation. It is largely intended to provide sustainable solutions, education, and research for under-resourced areas. Musculoskeletal trauma is in the top 3 disease conditions in the world which receives only 1% of total funding. IGOT is doing its part by often bringing in people, but the past year proved to be difficult. Thus, there was more online learning. An online portal is being developed with funds and will allow residence curriculum in combination with some specific teaching done in international programs. The portal will be accessible to under-resourced areas who wish to use it. Another IGOT activity is COACT (Consortium of Orthopaedic Academic Traumatologists) with 20 different centers in North America that do international work which is coordinated at ZSFG. Other leadership activities include Dr. Miclau as the Inaugural Chair for IOTA (International Orthopaedic Trauma Association) which is comprised of the 20 largest trauma societies in the world.
7. Financial Report: Orthopaedic Surgery’s Income 2020-21- There is a variety of sources. Support for Service can be provided from outside activities such that less than half of needed resources rely on affiliation dollars.
8. Service Goals (2021-22)
- a. Promote “UCSF/ZSFG Orthopaedic Trauma Institute”
  - b. Faculty recruitments and expansion of services
  - c. Recover from ongoing pandemic issues

MEC members acknowledged the amazing work done by the Service including its international work, research for young people, and collaboration with other Departments.