



Mid-Training Report | Evaluation of a Surgical Task-sharing Program in South Sudan | A UBC-MSF Essential Surgical Skills Training Program

Report Summary

Three trainees initially enrolled into this first cohort of the Essential Surgical Skills (ESS) program, beginning on July 1, 2019 and with a planned program completion date of December 31, 2021. Two are now still active trainees. Data collection for Entrustable Professional Activities (EPAs) began on January 1, 2020, and for procedure logbooks on March 1, 2020. EPAs for this curriculum were adapted from the Competency-Based Medical Education (CBME) framework, with individual technical and non-technical skills selected based on the case mix of this particular MSF context. Each EPA is scored using the O-SCORE Entrustability scale, a validated 5-point Likert scale, where a score ≥ 4 is indicative of successful competency in that specific EPA. EPAs were clustered in 8 different modules, representing different areas of essential surgical care (Table 1.) This report represents data collected up to July 31, 2021.

Trainees have completed a total of **416 Procedures** and **251 EPAs**. EPA scores demonstrated a significant improvement over time, with the majority of demonstrated end-points by July 2021 at scores of 4 and 5, indicating the competence of the trainees to perform specific procedures independently. Specifically, the two active trainees are now deemed competent in **20 procedures (33% of total)** including chest tube placement, open fracture management, laparotomy, c-section, and skin grafting.

Overall, the three trainees demonstrated a significant contribution to the surgical volume at Aweil State Hospital, **performing 31% of all surgical procedures at the institution** between March 2020-January 2021 (385/1233 procedures). These values reflect MSF institutional data which is only available up to January 2021, and excludes counts of minor procedures (change of dressings). With respect to impact on patient outcomes, surgical morbidity and mortality rates recorded during the implementation of the ESS program remained steady and unchanged from pre-implementation rates.

Module Name	EPAs
Module 1-Safe Surgery	21
Module 2-Airway and Anesthesia	5
Module 3-Trauma	7
Module 4-Source Control	40
Module 5-Fracture Management	40
Module 6-Burn Management	76
Module 7-Pediatric Surgery	24
Module 8-OBGYN	38
Total	251

Table 1. Number of completed EPAs for all trainees, per module.

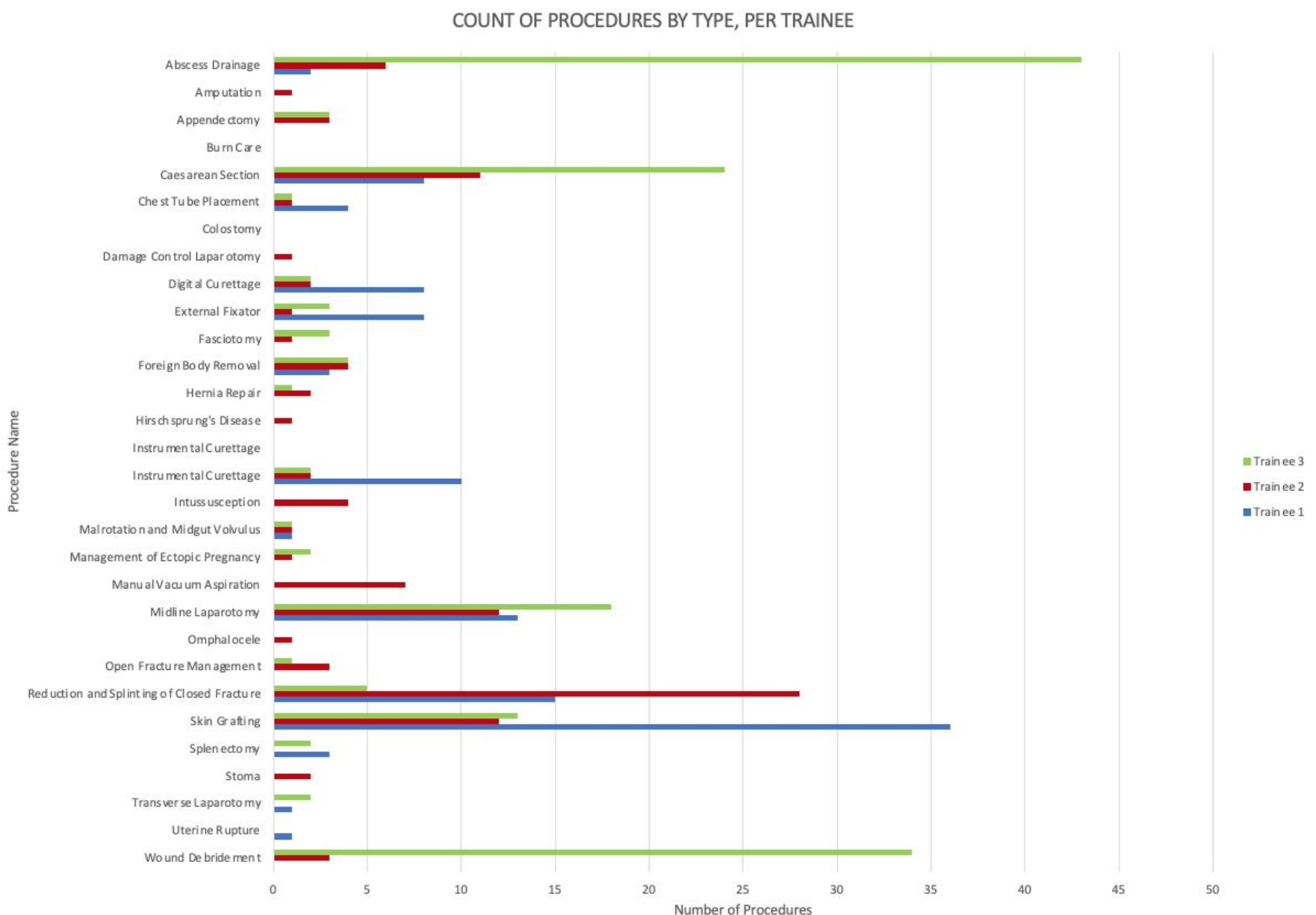


Figure 2. Count of procedures performed shown by trainee.