Evaluation of health care delivery, safety procedures, and canine welfare in an inpatient Animal-Assisted Therapy (AAT) program: A multicenter Failure Modes and Effects Analysis (FMEA)

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Abstract

Background: Growing evidence supports the use of animal-assisted therapy (AAT) as complementary therapy for various clinical conditions. In the academic literature, increasing evidence highlights utilization of AAT to address pain, anxiety, stress, depression, enhance mood, increase socialization, and increase energy levels. Currently, there is limited evidence-based practice research identifying and addressing areas of improvement within AAT programs. Our research aims to evaluate AAT at our institution using a Failure Modes and Effects Analysis (FMEA).

Methods: An FMEA is a tool for conducting a systematic analysis of a process in which potential risks may occur. For our study, we formed a multidisciplinary team and convened for 6 sessions to complete an FMEA table. Our research team reviewed, evaluated, and recorded failure modes pertaining to three process categories: health care delivery, safety procedures, and canine welfare. We devised improvements to prevent the identified failure modes.

Results: The process tree created consists of 8 subprocesses and 40 total steps or entries. The data analysis indicated 16 total failure modes, with RPNs ranging from 2 to 48 among which 4 failure modes fell within the "very high" risk category with RPNs greater than 40. The data analysis indicated that the two failure modes with the highest RPNs included failure to complete request list (RPN: 48) and canine contamination of injection site(s) (RPN: 48).

Discussion: For half of 16 failure modes, we found improving the program's orientation and training process to be an appropriate preventative action. We will continue conducting evaluations of every failure mode at 3, 6, and 12-month time points. These results bear importance to a better understanding of the current challenges and improvement opportunities for inpatient AAT. One limitation of the study was the relatively small size of the research team which could have included more agents within the overall process.

Biography

Christian Tejeda is a second-year medical student at the David Geffen School of Medicine (DGSOM) at UCLA passionate about health equity, integrative medicine, and global health. A member of the Program in Medical Education - Leadership and Advocacy (PRIME-LA), he is pursuing a dual-degree (MD/MBA) within a unique five-year program focused on cultivating physician leaders and advocates committed to underserved communities. He received his B.S. in Psychobiology with minors in Global Health and Music History from UCLA in 2017. At DGSOM, he has founded two student organizations, Community Healing through Art Medicine Program (CHAMP) and Lifestyle Medicine Interest Group (LMIG), through which he aspires to educate UCLA's medical student body about therapeutic arts and complementary medicine as well as serve local underserved communities. In addition to the current research project, he is conducting clinical research examining the use of animal-assisted therapy to improve pain and anxiety for inpatient palliative care patients.