



Grisselle Centeno, PhD



The Bloodmobile Routing Problem

Monday September 25, 2017

4:40PM in 1123 LBME

Blood centers must determine on a daily basis a set of locations among a group of potential sites to route bloodmobiles for blood collection so as to avoid shortages for health interventions. In this study, a vehicle routing problem is modeled using integer programming approach to identify number of bloodmobiles to operate, and to minimize the distance travelled. The model is extended to incorporate uncertainty in blood potentials and variable durations in bloodmobile visits.

Dr. Grisselle Centeno is an Associate Professor in the Department of Industrial and Management Systems Engineering at the University of South Florida. Her research and teaching interests include optimization-based modeling for the planning and control of operations in healthcare, transportation and manufacturing industries. She possesses experience in working with large-scale mathematical programming models and building decision support systems. Her research work has been supported by NSF, FDOT, and ONR, among other sources. Dr. Centeno is also highly involved in conducting research in the area of engineering education and promoting the growth of a diverse engineering workforce.

The seminar series “Providing Better Healthcare through Systems Engineering” is presented by the U-M Center for Healthcare Engineering and Patient Safety (CHEPS): Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach.

For additional information and to be added to the weekly e-mail for the series, please contact genekim@umich.edu