Study Title: Integrating data, algorithms and clinical reasoning for surgical risk assessment

This study was approved with the Waiver of Documentation of Informed Consent as the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context. Upon review of this document your electronic signature will serve as the acknowledgment receipt for this document. You will receive electronic copy of the document.

Purpose of the research study:

The objective of this study is to to *implement and evaluate an intelligent perioperative system for real-time automated risk analysis and to compare it with physicans' risk prediction.* Our research group in conjunction with University of Florida Information Technology team will implement intelligent perioperative system (IPS) developed as an open-source, scalable, plug and play software system on high-performance computers within the Shands/UF secure network. We will use IPS to implement computational algorithms developed at University of Florida to calculate risk scores for major postoperative complications. We plan to recruit physicians practicing in adult inpatient perioperative medicine and compare their clinical risk assessment performed as a part of routine clinical care with risk scores calculated by IPS algorithms.

What you will be asked to do in the study:

If you decide to participate in this study, you will be asked to create your anonymous profile and login with your UF credentials. We will ask general information related to your experience, specialty and level of training. We will ask you to complete three simple surveys to assess your numeracy skills and your cognitive style during decision making.

Upon enrollment we will ask your risk assessment for major complications for patients you are scheduled to see in the operating room. You will be able to provide your input using the link to the interactive web-portal. For each case, you will be asked to provide risk assessment using a risk analog scale from 0-100 with respect to a set of major postoperative complications. After providing your evaluation, you will be presented with the computer-generated risk scores and the top contributing risk factors toward that assessment. For each factor, you may optionally provide positive or negative feedback. Following the software's classification results, you will be given a chance to revise your own assessment of the patient. We will use aggregate risk predictions from all physicians and compare it with the accuracy of the computer algorithms.

Time required:

You can choose to provide feedback on as many patients or complications you want. We estimate that you may need 5 minutes to complete an evaluation for one patient.

Risks and Benefits:

The study will pose no risk to any participant. We do not anticipate that you will benefit directly by participating in this experiment.

Confidentiality:

This study does not collect any personal data. Your identity will be kept confidential to the extent provided by law. Your information will be assigned to a specific software login and there will be no connection between any of your personal information and your login profile. Your participation in this study is completely voluntary. There is no penalty for not participating. You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study:

Azra Bihorac, MD
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Phone: (352)-273-9009

Completion and return of the survey implies that you have read the information in this form and consent to take part in the research. Please keep this form for your records or future reference.