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JAMES C. COX &  
PATRICK S. SULLIVAN

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[HTTPS://EXCEN.GSU.EDU/JCCOX/](https://excen.gsu.edu/jccox/)

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### **Required Skills:**

Mobile App Development,  
Responsive Web Design, iOS,  
Android, Windows, Project  
Management, Communications

### **Preferred Team**

#### **Communications:**

Weekly or as needed

#### **Data Sources:**

Currently developed app contains  
detailed daily instructions for active  
patient engagement in ERAS  
protocols.

#### **Other Items:**

Project has timezone flexibility.  
Mentors and students will  
determine a good time for virtual  
meeting.

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## **SMART ON FHIR APPLICATION FOR PATIENT COMPLIANCE WITH PROTOCOLS FOR ENHANCED RECOVERY AFTER SURGERY**

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This project is on patients' uptake of Enhanced Recovery After Surgery (ERAS) protocols. We worked with students in the course in Fall 2016 to develop an app for patient's mobile device (iOS, Android or Windows). The current proposal is for further development as a SMART on FHIR application.

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### **PROJECT OBJECTIVES**

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Further develop the existing app as a fully functional SMART on FHIR application. The objective for the app is to alert and audit patient outcomes as well as record patients' compliance.

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### **SUCCESSFUL PROJECT**

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We are interested in development of a user friendly application for use by patients. There currently exists a colorectal ERAS patient app developed in Fall 2016. The existing app incorporates ERAS instructions for "Preparation for Surgery, Day of Surgery, Hospital Stay and Leaving the Hospital". The next stage for the app is to be interactive and able to monitor and alert the patient (or a family member) when ERAS targets for the patient are missed. Ideally it should also be able to record the responses to alerts. Elements of further development include: Deployment with client; Communication with Client EHR Server; Full SQLite Implementation; Push notification from physician (ex: change of surgery date); Consult physician through in app messaging; Admin login on physician end to track patient targets within app; Notifications to physician if the patient is not meeting specific goals.

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**Intellectual Property:** My project cannot share IP. The IP is owned by my organization. Students will be recognized as contributors.