

# EMMA APP

The idea for Emma originated from a team of undergraduates at the University of Oklahoma working with ImproveCareNow clinician, Dr. John Grunow, at their health sciences center. The app was generated out of the Software Business Accelerator (SoBA) within the Center for the Creation of Economic Wealth (CCEW). Working with the clinical staff, the 10-person student team—made up of programmers, graphic designers and strategic analysts—ideated, designed and developed Emma to help address some of the issues described by Dr. Grunow.

## The Game | AIM

Emma is designed to engage young patients in the waiting room during their clinic visit, while giving clinicians a quick pre-visit snapshot of their condition. The iPad app aims to test and increase patient knowledge in four areas:

- 1) Quality of Life
- 2) Wellness
- 3) Patient Nutrition
- 4) General Nutrition

Patients are also tested on psychological health at the end of gameplay, with a series of questions designed to display how the patient feels on a daily basis. The app also aims to change the clinician's interactions, working to make 20% of the clinical encounters different than they otherwise would be based on the game results.

### New Features

We have implemented a new feature to the application, through which the results of each run-through of the game are saved into a CSV format file that can be read from Excel. This will help facilitate data analysis and review of past patient responses.

A text field on the initial patient setup screen allows the medical assistant to enter in an ID string. This will then be appended to the file name on the CSV to allow the patient's responses to be referenced to them and saved over time.

## CONTACT

### Project Staff

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### Project Lead

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## Gameplay & Clinic Flow

The beta version is currently being tested at two ImproveCareNow care centers: University of Oklahoma with Dr. Grunow, and Mayo Clinic, with Dr. Jeanne Tung.

Once the patient arrives at clinic, the iPad will be handed to them and non-identifiable patient specific information will be entered (like medication, location and trigger foods). Then the game will begin, which consists of launching a rocket across an island with the goal of traveling the furthest distance. Each time the rocket lands, the patient will be asked four questions.

After four rounds the iPad is then handed back to the medical assistant, and the results are printed and presented to the clinician prior to the patient being seen; and the results are also attached to the health record.

### Confidentiality

All the patient-entered data is non-identifiable. The device the game is played on (iPad) remains in clinic, and is handled by designated medical staff and stored in a secure location. No data is stored on said device, and each gameplay starts at new homescreen for every patient. The results are securely emailed, and stored in a secure database.

## Requirements to Participate

- You are a pediatric patient with IBD
- You are currently seen by University of Oklahoma or Mayo Clinic