## UNDER PRESSURE

#### Georgia Grand Tech Challenges

#### Problem

Pressure Injuries - Painful and dangerous sores developed as a result of prolonged pressure



# How might we prevent pressure injuries?

#### **Statistics**



#### Early Adopters

Partner with Emory Hospital
One-time sale for device installation
Subscription for notification system

#### Interview Insights

- Mechanical solutions are ineffective
- -The product when used in tandem with nurses would be most effective

### Problems with Solutions

- Body composition varies pressure
- Nurse's busy schedule -> unable to turn patient
- -Two hour turning period has no evidence









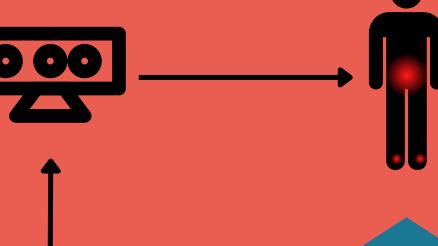
Temperature Immobility Moisture

Pressure

# Depth Camera Takes Image







Pressure Data Recorded



Algorithm Detects
Ulcer Forming ->
Notifies Nurses

Nurse Interacts and Moves Patient

#### **Unique Value Propostion**

Low Cost solution~40 dollars

Accounts for different body types

Easy setup

#### Next Steps

Improve camera accuracy

Develop initial notification algorithm using past data

Create Interface

Test camera's effectiveness In hospitals

Develop cost-effective prototype

#### **Experiment Data**

