# CPMP Compliance Department Claims Auditing Software Application

Danny Chen, Jadon Leong, Kamran Butt

## Background

The **CPMP Compliance Department** at Stony Brook Medicine manages the corporate compliance and privacy program for its Clinical Practice Management Plan (CPMP). The program includes:

- Monitoring compliance risks related to federal healthcare program requirements like Medicare and Medicaid.
- Conducting internal audits and evaluations to ensure compliance with billing, documentation, payment practices, and other critical areas.

Historically, audits were performed using Microsoft Excel. In 2019, the MD Audit software was adopted to streamline audit processes but faced usability challenges, particularly in generating findings reports directly for providers. When the contract renewal approached, **dissatisfaction with MD Audit** and **high costs** led to its discontinuation.

Audits have since reverted to spreadsheets while exploring alternatives.

### Timeline

- 1. Established a weekly meeting schedule with Professor Williams
  - a. Professor created an audit prototype with Python
  - b. Students created both a spreadsheet containing various info + entity relationship diagram (ERD)
- 2. 1st meeting with IT team
  - a. New plan → Create the application using .NET instead of Python, as the IT team prefers .NET
  - b. Established a bi-weekly meeting schedule
- 3. 2nd meeting with IT team
  - a. Began discussing about deploying Professor's .NET prototype, which was pushed in Azure DevOps
  - b. Decided on using single sign-on authentication
- 4. Where we are right now
  - a. Students are beginning to help add to the .NET files, starting with the models
  - b. Problem at present → Errors when running the files on the students' systems + other editors like Google
     Cloud Shell

## Desired Functions of the Application

#### Audit Process

- Import billing claims data (both prospective and retrospective)
- Audits will be reviewed and passed between analysts, auditors, and quality assurance before processing

#### Data Analysis

- Processed claims will be...
  - fed into a monthly roll up report
  - reviewed and analyzed to assess potential patterns of improper billing

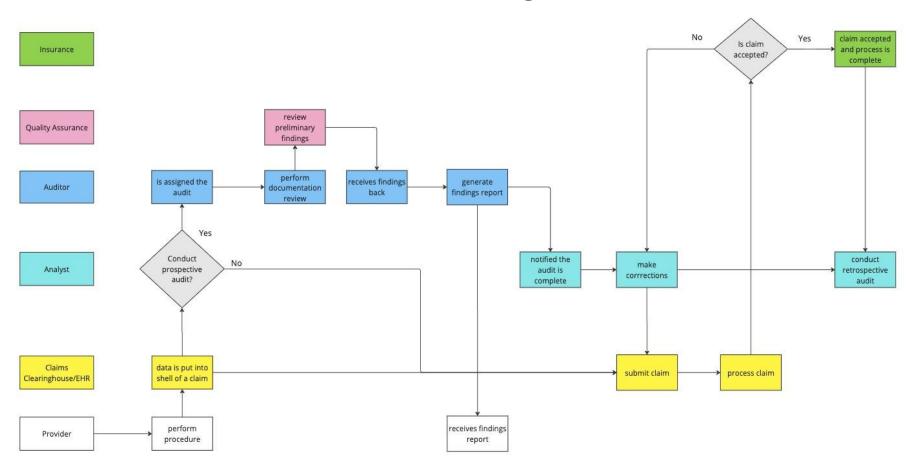
#### Reporting

• Reports can be generated with customizable fields to cater to specific stakeholder needs

#### Scalability and Staff Goals

Audit up to 600 providers yearly when fully staffed

## Process Diagram



## System Architecture

