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### Ethics Paper

In terms of testing the machine, we should find a perfect balance between cost of production and cost of public access. Pouring money into production will ensure that the machine runs efficiently and give us space to program and debug the system. On the other hand, it will not only cost us more, but will cost patients more, resulting in a reliable yet expensive service. Cheaping out on production will result in a more accessible machine, but there is little guarantee that everyone can afford it if they need it. I'm not personally in favor of charging people so much at once for a health service, but I do have an idea for a pay method that's more affordable. Instead of charging everything at once, maybe offer to receive periodic payments over a set time period after usage, such as Proverbs 3:27, "Do not withhold good from those to whom it is due, when it is in your power to do it".

The most important part is that we don't make a half-hearted effort to save cash. People are counting on us to give them proper service and trust us for results. Colossians 3:23 states, "Whatever you do, work at it with all your heart." If we cheap out, service and reliability will decline, putting even more lives at risk.

Another solution I have is ensuring our hired programmers are certified to tackle situations like this. For the Software Engineers, they must go through a certification process before being qualified to operate such advanced equipment. Part of why the machine malfunctioned was from the mistake of a single programmer. Making sure they're able to properly run the technology and successfully troubleshoot errors should be a priority to prevent

more incidents like this from ever happening. This is already being practiced by several other organizations, such as the American Academy of Professional Coders. Many exams are offered on their site, such as Risk Adjustment and Professional Coder. This appears to be a growing requirement, as their website lists, "According to the U.S. Bureau of Labor Statistics, medical coding is one of the fastest growing professions in the nation" The one downside is that their exams are very expensive. To work around this, we can pour more budget here instead of just upgrading the machine, which will not only help programmers get a job, but ensure we hire certified professionals that know what they are doing. It's also becoming more aware to the public that things like this must be prevented, as the reports lists, "Most accidents are system accidents; that is, they stem from complex interactions between various components and activities." Training people to circumvent problems on their own and keep machines up and running properly should become a top priority. This will prevent system accidents from becoming a recurring problem. We can also improve our security and backups, since this was all caused by a programming error one person tried to fix. We should also have troubleshooting being done on the side, in case urgent care is needed.

In conclusion, while spending money on a better machine might be one solution, we can also pour more money into training and hiring better and more experienced programmers. Either way, our goal should be to balance cost with guaranteed trustworthy service and treatment for our patients. Offering patients to pay us over the course of a set time period may not be profitable, nor is a guaranteed solution, but it can help anybody who can only afford so much. Alternatively, having certified programmers will also not only help them find jobs, but ensure they're approved to do theirs while providing all the troubleshooting necessary in case of emergencies.

## Works Cited

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