Big data is an interesting topic for multiple reasons. Many organizations rely on information, anonymously gathered or not, to determine what is best to do with their products, their employees, their companies, and even for the industry itself. The most common questions though that a lot of executives may have however, is “What is the big deal with Big Data?” and “How in the world can it be used and applied in our business?”. These are some legitimate questions and concerns, but it is even more important and concerning when it comes to Big Data being used in Health Care. Overall, a large number of people in multiple fields do believe that the application of it could be helpful in reducing deaths by discovering and targeting issues before they get large or spread out. The issue however, is that it may not be as readily available, and frankly we may not know quite how to use it yet.

In response to the idea that the data could be used to prevent diseases before they spread, Brent James of Intermountain Healthcare stated that a large portion of the data gathered from EMR’s is actually recreational data now (Adamson, 2017). The reason for this is that only 400-600 of the 1000+ tables that hold information from EMR’s are outdated and no longer relevant to what is going on in the medical field currently. Stephen Mooney, an epidemiologist at Columbia University's Mailman School of Public Health even said “It would be easy to naively assume we know more about this than we do." in reference to an experiment where they were able to successfully predict about 5 – 15 percent of patients who had terminal cancer based on their internet search history. This isn’t to say that the information would never be helpful in future research as it is promising, but as it currently stands there is no real value to that older information or low percentiles of diagnosing. If the information that is on file won’t help with today’s diseases and problems, then it doesn’t make sense to worry about it (Selyukh, 2016).

Another point that is worth noting is that Big Data itself might not be very relevant or worthwhile to implement in the current healthcare system. The current healthcare analytics systems uses relational databases that are able to provide all of the required data that one needs and it is already developed and working(Adamson, 2017). The cost to develop and integrate and Big Data system for all healthcare facilities would be very expensive. But again, this doesn’t mean that the idea is a bad one. The current system doesn’t show a need for it since most of the information that is gathered for medical research is done at the hospital or clinic. With the advancement of wearables like smart watches and other technology that we use on a daily basis, there may be a need in the future to collect all of that data for a Big Data scheme where it could be used and referenced if that person ever does go into a hospital.

The best way to probably describe the use of Big Data in society, and even more specifically in healthcare, was the way Mooney put it. He said“To recognize that it's exciting and concerning at the same time.”(Selyukh, 2016). While the idea of Big Data helping with making society more efficient and possibly saving lives is great, it needs to be understood that it is still not ready. The structure, environment, and data gathering techniques for the medical field currently do not support what Big Data has to offer. More research needs to be done to further discover how effective it truly is and to help dispel any misgiven hype that it may have. All in all, it does show that it may have the potential to change how medical care is handled. One day, we may be able to walk into an ER, given them some kind of identification number or personal identification card, and they may be able to query a large database to pull information regarding our health that our smart watch sent to it in the last 7 days, and we could be out of there minutes after signing in. That is one possible outcome of Big Data in Healthcare, but it will be one that will only be realized as a reality or a dream once we find a way to implement it successfully.

# References

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