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Theoretical and Practical Framework for a Universal Insurance Database

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# Problem Statement

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HE insurance industry collects a wealth of data from their customers that most other entities do not possess collectively. Currently, there are third-party subscription services insurance companies may use in order to report and query prior claim information for a claimant. However, the subscription fees tend to be very expensive and many small insurance companies are not members of such services, which creates inaccurate and/or incomplete records. Other services provide access to the verification of assets owned and prior insurance information but have the same pitfalls as the prior service. Since most of these services are membership driven, they are home to the major insurance carriers but neglect the value of the small insurance carriers. The information inaccuracies result in inefficiencies within major corporations and increase in claim cost, which results in a higher premium penalty for the customers.

A solution to this problem would be the development of a universal insurance database. A universal insurance database would host claim, sales, underwriting, and much more data for the insurance carriers to be used for cost-saving strategies in an effort to reduce premiums for the customers. While we believe a universal insurance database would result in quicker claim resolutions and a substantial decrease in expenses, we also believe a single database housing the information would be much more efficient and practical for all parties involved.

# methodology

In order to test our hypothesis, we will design two database structures. One database will be structured using today’s fragmented structure and the other database will resemble the universal insurance database, which will be presented as a central repository. Both databases will be presented with queries in order to extract and output the same information. The queries will be measured based on response time in order to test the efficiency of the database. Multiple queries will be performed to obtain a healthy output number.

Both designs will be compliant with the current legislative regulations in order to protect personal identification information. This will ensure both designs are compliant with federal law. While many states impose further regulation (such as file retention), for the sake of the study we will focus solely on being compliant with federal law.

1. PREVIOUS WORK

Preliminary research shows that an effort to consolidate healthcare claims information has been taken on by the APCD Council. APCD are all-payer claims databases and they exist on a state by state basis. These databases are state wide consolidations of health-care claims information, but not all states have them.

1. RESEARCH SCHEDULE

Week 5 – Research on previous work in this area.

Week 6-7 – Building databases

Week 8 – Preliminary Results for Lightening presentation

Week 9-10 – Finish testing

Week 11-12 – Write up rough draft

Week 13-14 – Prepare final presentation, work on paper

Week 15 – Finish final draft

1. RESOURCES NEEDED

The only resource needed is a software to build our databases in. Since, this project is on the logistics of consolidating multiple sources of information, the data does not need to be real.

References

1. Nunn, T. (2007, March 26). *Consumer Data Protection*. Retrieved from Insurance Journal: <https://www.insurancejournal.com/magazines/mag-legalbeat/2007/03/26/78291.htm>
2. “Interactive State Report Map.” *APCD Council*, 17 June 2015, [www.apcdcouncil.org/state/map](http://www.apcdcouncil.org/state/map)

1. This proposal was submitted for review on Feb. 4, 2019.

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