

Executive Summary

Jadr Health Insights

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Our project will provide a real-time tool predicting the effect of current environmental conditions on asthma-induced emergency room visits. People living with asthma and health professionals can use a dashboard to evaluate the risk of asthma symptoms given current conditions in their locale. Further, our report will include the correlation between manufacturing industries and asthmatic emergency room visits. This could help public policymakers quantify the health effects of new manufacturing in their region.

Major Project Questions:

1. Predicting asthma-related emergency visits with air quality
 - a. What is the correlation between air quality metrics and asthma-related emergency visits?
 - b. How can air quality metrics predict asthma-related emergency visits?
 - c. What is the projected asthma risk for a selected county in the US based on the modeled relationships from California?
2. How do asthma-related emergency visits correlate with types of local industries?
3. Are types of local industries and air quality metrics related?
4. What system architecture will allow for future expansion to real-time updates of predicted asthma symptom risk based upon user-select location?