

# [Health informatics paper](https://assignbuster.com/health-informatics-paper/)

The Immunization database (tables shown below) has been created with the purpose of obtaining, & maintaining Immunization Information for all children through the age of 6. This database will be functional at the state level, which is Texas, & will be accessed via the web, giving access to all healthcare professionals, including physicians, nurses, & public health staff, as well as school officials that require immunization information.

This relational database will give health care refashions the ability to determine what vaccine(s) the patient needs when they visit their office for the first time, or as a recurring patient, & they will be able to discern whether or not the patient is up to date. This will eliminate the unnecessary need for revocation & to ensure all children enrolled in the immunization tracking system have full protection from certain diseases (Carroll, et al. , 2003).

Public health officials & staff can use the information in this database to determine if children are receiving vaccinations as they should, what demographic, or geographic area is in deed of an Immunization Intervention program, & to evaluate the effectiveness of such evaluation programs. If a child Is not up to date on their vaccines. A letter will be sent as an outreach effort to remind the parents that their child's immunization are past due, along with a list of which immunization are needed.

Both the public health professional & the healthcare provider will inform patients of any recalls of vaccinations or its non-effectiveness in providing protection based on the lot number & the manufacturing company's name. School officials will be able to access this database to verify that the child has received the Immunization required for school entry, or continuance of school attendance. If a child moves from one school district to another, this information can be gathered via the database without having to wait several hours or days for the information to be returned.

This will allow immediate entry for the child without any days of school or lessons missed. All information received via this database can be printed to be placed in patient records or school records If required. Information gathered at the state level can then be relayed at the deader level to ensure health Initiatives concerning Immunization with Healthy People are being met (Healthy People, 2013). Key stakeholders in this operation will include administrators of the current immunization registry to ensure the ease of transfer from the current system to the new interoperable database.

Other stakeholders will also include IT staff, project managers, & management staff, personnel who will need the access to gather information on patients or students, Including healthcare staff, public health staff, & school officials. Most Importantly, the giggly involved in the development process. The requirements for this database are minimal, but critical to the daily operations of staff in all professions involved with this project. Since this database will be a web application, this information must be easy & quick to enter by health care staff.

Entry by healthcare staff will be entered via the social security number, or the ID number assigned to the child by the immunization registry. If the child has no social security number & the healthcare staff needs to search to obtain the registrant ID, the child's name & date of birth must be entered. Staff in this situation need to be careful since there may be several children with the same name. In this case, the user must ensure the address or phone number listed for the child is the same as the one they have on file.

Retrieval of information by healthcare & public health staff, & school officials must be immediate by either entering the child's social security number, or full name & date of birth. If the full name & date of birth option is used, the child's current/last known zip code must be entered as well, as there may be multiple children with the same name, & in rare cases, the same name & same date of birth. If the registrant ID number is known to the school official, this may be entered as well for immediate return of information.

Entry or retrieval of this information must be simple enough to where normal business operations are not interrupted or altered (Carroll, et al. , 2003). Each healthcare provider & public health professional who has positions relevant to immunization & records, will only have accessibility to this information with their own unique user name & password. The use of a surname & password would be used for tracking purposes, in case a breach of confidentiality is noticed.

Communication of the goals & objectives of this project, as well as the progress of the project, will be the prime effort of preventing resistance to the new changes to come (Laureate Education, Inc. , 2008). Various training sessions for all management & users, as well as testing the prototype of the database for data entry & retrieval will also be a key strategy. This will allow user & management input, as well as a direct relationship with IT staff so that their needs are met to the best of the project's ability (in terms of money) when they have to enter or retrieve the immunization information.