ESSENTIAL ELEMENTS OF A MASS VACCINATION MODULE

A core deliverable of this project was to identify the essential elements that should be included in a mass vaccination module.

Based on the findings of this assessment of mass vaccination solutions, the following list details the core capabilities and attributes that should be included in a model mass vaccination module.

- Requires a username/password for logging in and accessing the system
- Provides immediate access to all patient records that exist in the core IIS
- Ability to tie patients, vaccinations, inventory, and reporting to a specific event or campaign
- Ability to leverage unique inventory items that will be used for the specific event or campaign
  - Vaccine type or specific countermeasure (CVX and NDC number)
  - Manufacturer
  - Lot number
  - Expiration date
  - Dose count/quantity
  - Funding source (if applicable)
- Tools to expedite patient lookup during patient registration/intake. Examples include:
  - Leverage cohorts or rostering features[72] to identify participants prior to event
  - Use driver's license barcode scanning[73] to generate search criteria (first name, last name, date of birth, and address)
  - Use barcodes generated by the IIS or CRA module and displayed on client documents (e.g., official immunization records, reminder/recall notices,[74] consumer portal printouts,[75] clinic registration confirmation[76])
- Tools to expedite entry of patient demographics during patient registration/intake. Examples include:
  - Reduce or minimize the number of required data entry fields*
  - Allow users to establish and leverage default values for fields that routinely have the same value
  - Auto populate city and state from ZIP code
  - Use driver's license barcode scanning to populate core demographic fields (first name, last name, date of birth, and address)[77]
  - Promote self-registration through a website, mobile device application,[78] or registration kiosk
  - Use "householding" to simultaneously register all members of the same household through a single registration form[79]
- Ability for user to assign individuals to a specified priority group or tier
- Tools to expedite data entry during vaccine/countermeasure administration. Examples include:
  - Reduce or minimize the number of required data entry fields
  - Allow users to establish and leverage default values for fields that routinely have the same value:
    - Clinic location
    - Date of administration (date of clinic)

        - Vaccinating/administering provider
        - Site/route
        - VIS date
        - VIS date given (date of clinic)
        - Inventory item details (if pulling from a single lot number)
    - Use inventory bar code scanning from boxes or vials to populate inventory item details[80]
    - Use inventory barcodes generated by the IIS or CRA module (e.g., scan sheets[81] or mobile device QR codes[82])
        - Mechanism to report patients and doses administered to the core IIS – preferably in real-time when internet access is readily available
        - Ability to automatically decrement inventory count as administered doses are recorded
        - Ability to represent an accurate, "on hand" available dose count for each vaccination site[83]
- Ability to calculate an accurate aggregate doses administered count for each vaccination site[84]
- Ability to support multiple mass vaccination campaigns simultaneously (e.g., COVID-19, annual influenza campaign, and hepatitis A outbreak)
- Ability to configure a single campaign to support multiple vaccines/countermeasures as part of the same event (e.g., COVID-19 vaccine and annual influenza vaccine)

***Required Data Entry Fields**

At minimum, a mass vaccination tool must collect enough demographic information to uniquely identify an individual and provide a mechanism to contact them post event if needed. Typically the minimum mass vaccination demographic data set includes: First Name, Last Name, Date of Birth, Sex/Gender, and Address. In the core IIS, there are a number of additional demographic data elements that are considered core: https://www.cdc.gov/vaccines/programs/iis/core-data-elements/iis-func-stds.html.

These data elements could be added (or removed) from a mass vaccination module depending on the needs of the specific campaign/event. There has been some discussion of the need to routinely capture race and ethnicity as part of the minimum mass vaccination data set in order to assess coverage disparities; however, additional discussion is needed to further analyze whether this should become a recommended best practice.

[72] This is supported by some IIS as core functionality. This is also supported in Envision's Mobile WebIZ application and MPP's ReadiConsent tool.
[73] Envision's Mobile WebIZ
[74] STC's IWeb
[75] STC's MyIR (Louisiana, Maryland, Arizona)
[76] MPP's ReadiConsent tool and CDC's POD Assist
[77] Envision's Mobile WebIZ
[78] MPP's ReadiConsent tool and CDC's POD Assist
[79] MPP's ReadiConsent tool
[80] STC's IWeb and Mass Immunizations Module, and CDC's POD Assist
[81] Envision's Mobile WebIZ, STC's IWeb and Mass Immunizations Module, and CDC's POD Assist
[82] Envision's Mobile WebIZ
[83] This represents the minimum reporting capabilities that a mass vaccination tool should be able to perform in order to meet any immediate reporting requests. As data is reported back to the IIS, the IIS can be used to facilitate more advanced reporting needs or to assess the mass vaccination effort across the entire jurisdiction.
[84] Idem.