



Immunization Registries – Potential Roles in Pandemic Outbreaks and Bioterrorism

Immunization registries are confidential, computerized information systems that collect vaccination histories and help ensure correct and timely immunizations.

Registries work because they provide a secure infrastructure that can include any health care provider, emergency room, local health department, and school in a geographic area. Having this infrastructure in place means registries could also be a powerful tool for tracking vaccines—and, if circumstances warranted it—antibiotics and other drugs in cases of pandemic disease or bioterroristic attacks.

In such public health emergencies, immunization registries could support the medical and public health communities in these critical ways:

In large-scale outbreak situations, such as pandemic influenza, by:

- assessing coverage levels for initial and any subsequent doses of vaccine;
- helping to ensure recipients of an initial dose in a series return on time for the subsequent doses(s);
- helping to appropriately ration doses of vaccine by ensuring persons who received an initial aren't able to receive subsequent doses before they are due;
- tracking adverse events and helping to identify "cold" lots of vaccine with less than expected efficacy; and
- assessing population coverage levels by geographic area, age groups, or other factors of interest.

In combating bioterrorism, by:

- tracking who got what vaccine products on what date;
- tracking antibiotics or anti-viral drugs, to help ensure multiple prescriptions and black market prescription drug activity is kept to a minimum;
- reminding patients of their next due date for multi-dose vaccines, such as with anthrax; and
- assessing population coverage levels by geographic area, age groups, or other factors of interest.

Using an existing information system infrastructure like registries present a number of advantages over creating a new system:

- Health care providers and other users are already familiar with the software, so a minimum of training would be required.
- There would already be minimal access point(s) for the collected data (versus contacting each provider separately).
- The security (user logins, user authentication, data back-ups, etc.) and the privacy precautions are already in place.
- Registry staff are experienced in generating and analyzing assessment reports at various levels of analysis.

While the public health authority to operate immunization registries may need to be expanded to cover some of these situations, such as tracking antibiotics or antivirals, it is clear that registries offer a powerful tool in responding to large-scale disease outbreaks and other public health emergencies.

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