2D Barcodes Improve Data Collection and Save Time for Pharmacies

As part of the FDA's on-going efforts to improve tracking and tracing vaccines, two-dimensional (2D) barcodes are required on vaccine units of sale. They help providers **capture and submit accurate and complete vaccine data** during administration and **increase inventory management efficiency.**

Pharmacies have a significant role in the effort to accurately collect and submit vaccination data because many pharmacies now provide vaccines.

ABOUT 2D BARCODES

ALMOST 90%
Of units of use (i.e., vials and syringes) contain 2D barcodes

IMPORTANT IDENTIFIERS

100% Of vaccine units of sale (i.e., cases and cartons) contain 2D barcodes

The National Drug Code (NDC), lot number, and expiration date are some of the available data embedded into the 2D barcode

2D BARCODES BENEFITS

- Ensures faster, more accurate and complete vaccine data collection and recording
- Automates submissions into electronic health record (EHR) or immunization information system (IIS)
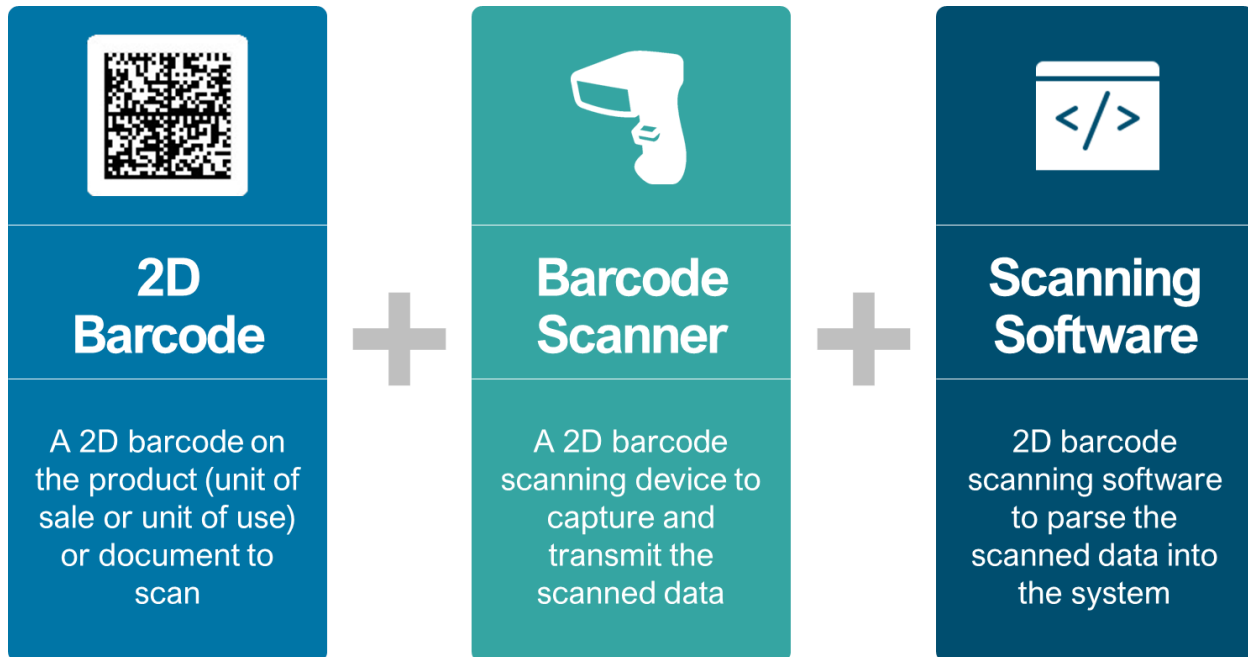- Simplifies tracking and tracing of inventory of units resulting in overall improved accuracy
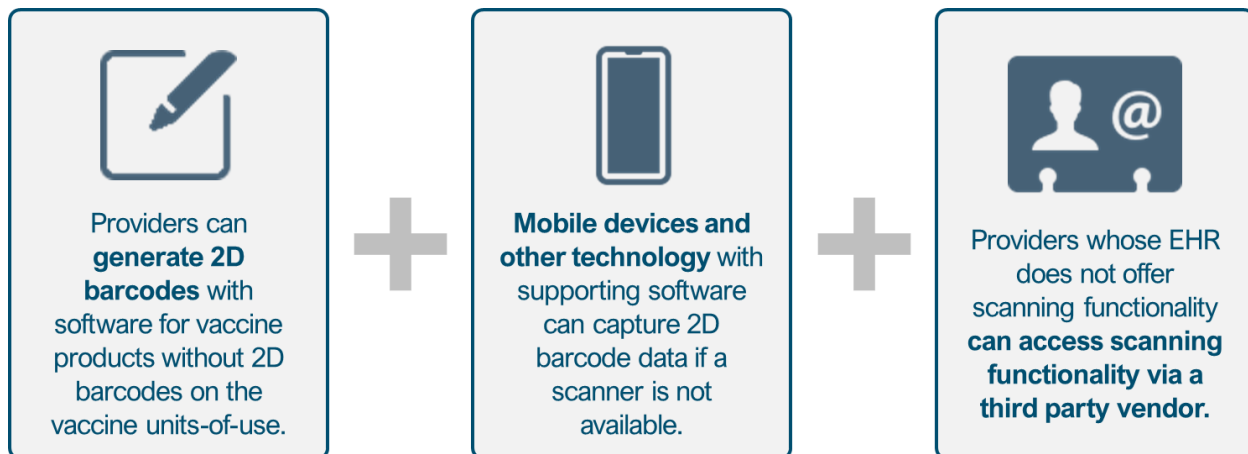- Contains more data elements in less space than linear barcodes or alphanumeric data

2D Barcode Uses Three Components

2D Barcode	**Barcode Scanner**	**Scanning Software**
A 2D barcode on the product (unit of sale or unit of use) or document to scan	A 2D barcode scanning device to capture and transmit the scanned data	2D barcode scanning software to parse the scanned data into the system

In cases where one or more recommended components are unavailable for provider use, the following workarounds can be implemented to support existing scanning practices.

Providers can **generate 2D barcodes** with software for vaccine products without 2D barcodes on the vaccine units-of-use.	**Mobile devices and other technology** with supporting software can capture 2D barcode data if a scanner is not available.	Providers whose EHR does not offer scanning functionality **can access scanning functionality via a third party vendor.**

Resources for Implementation and Use

The CDC Vaccine Two-Dimensional (2D) Barcodes website offers resources for providers—including pharmacies—to implement 2D barcode scanning and maximize existing scanning practices.

- Implementation Toolkit: lists resources for scanning best practices, training tips, adoption and adherence strategies, and in-depth guides for technical implementation.
- Software Functional Capabilities Guide: supports the development of scanning functionality for health information systems.
- 2D Barcodes Shipping Table: lists the vaccine products that have 2D barcodes on the unit-of-use.