



A story about immunization supply chains in country

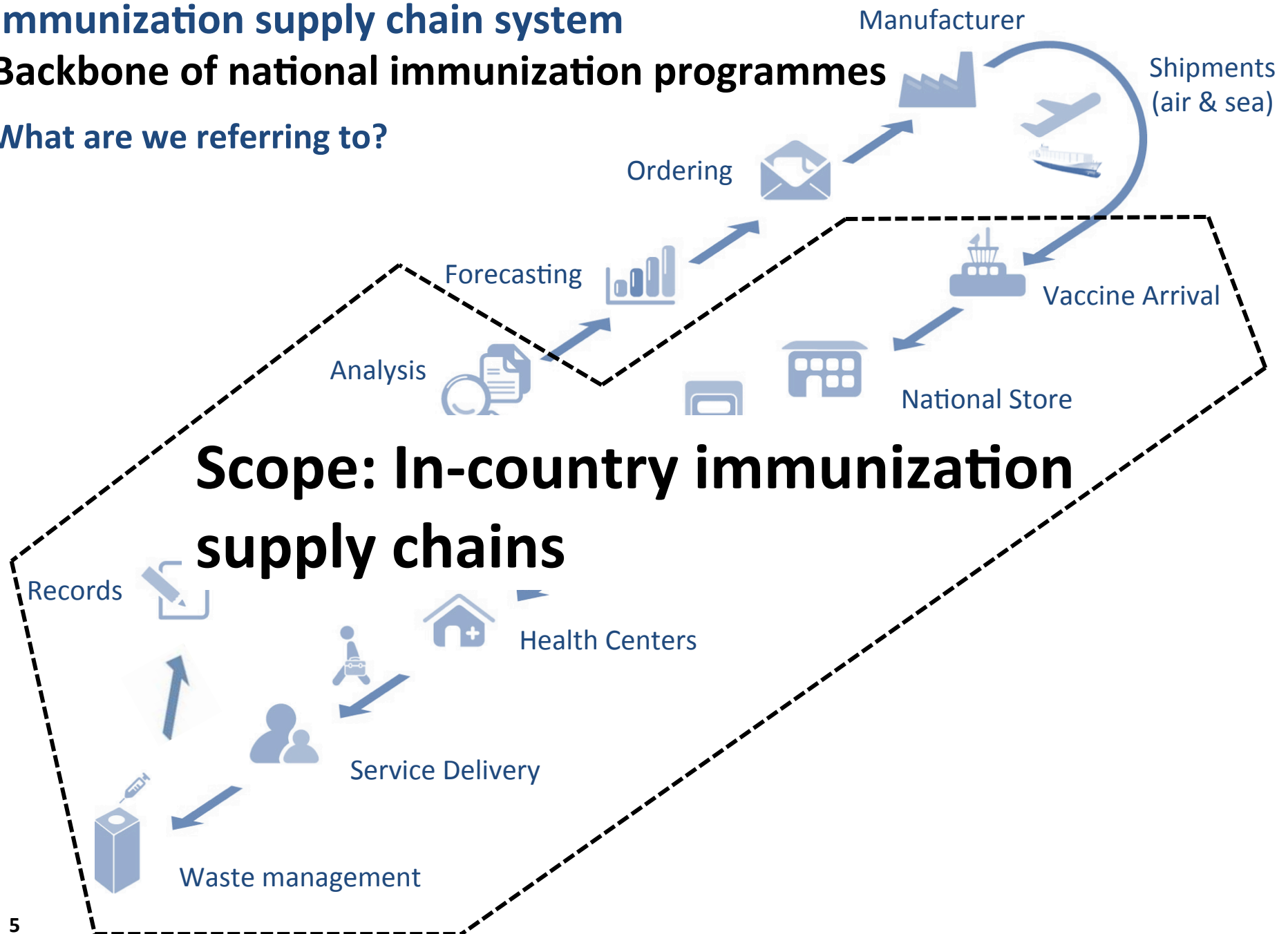
Jos Vandelaer (UNICEF)



Immunization supply chain system

Backbone of national immunization programmes

What are we referring to?



Immunization supply chain system

Backbone of national immunization programmes

Supply chains developed over 30 years ago!

Taken for granted that these systems run smoothly today

Recent evidence indicate that systems are stretched

And will be a bottleneck to new vaccine introduction if we continue with “business as usual” approaches to addressing current and future challenges!

Vaccine Arrival

Frequency and quantities are increasing



Vaccine Arrival

Vaccine volumes exceed management capacity



Challenging vaccine shipping containers on arrival

Shipping container of pneumococcal vaccine
= 400 kg / 2m tall

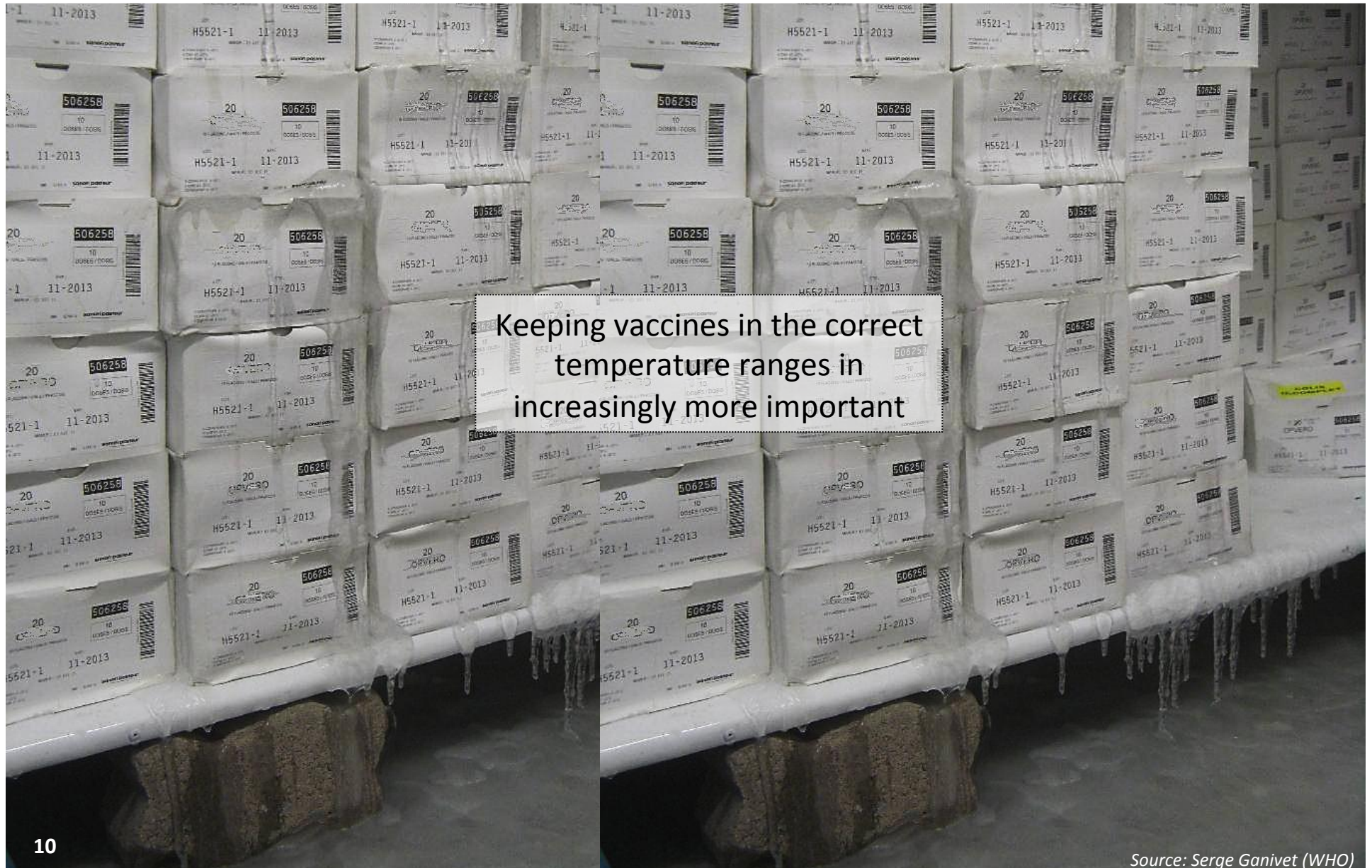
Storage Capacity

More and new vaccines fill limited space




Temperature Control

Temperature monitoring essential but costly and not prioritized




Maintenance

Cold chain equipment requires regular maintenance



Cold room door
no longer closing

A close-up photograph of a cold room door handle. The handle is a metal plate with two screws. The surrounding area of the door is heavily corroded and stained with brown and orange residue, indicating significant wear and potential failure of the door's sealing mechanism.



lack of spare parts and
technical ability to
maintain equipment

A photograph showing the interior of a cold room. The room is filled with stacks of white boxes. A large, clear plastic bag is draped over the top of the boxes. Above the boxes, two large black fans are mounted on the wall. A yellow warning sign with a red lightning bolt is visible on the wall. The overall condition of the equipment appears poor, suggesting a lack of maintenance and spare parts.

Distribution

In-country transport is the weakest link in the supply chain



More and more expensive
vaccines to handle and less
and less trained national
logisticians

Distribution

Reaching the last mile with vaccines is that hardest



Infrastructure

Ancient and inefficient equipment is still used at health center level



Human resources

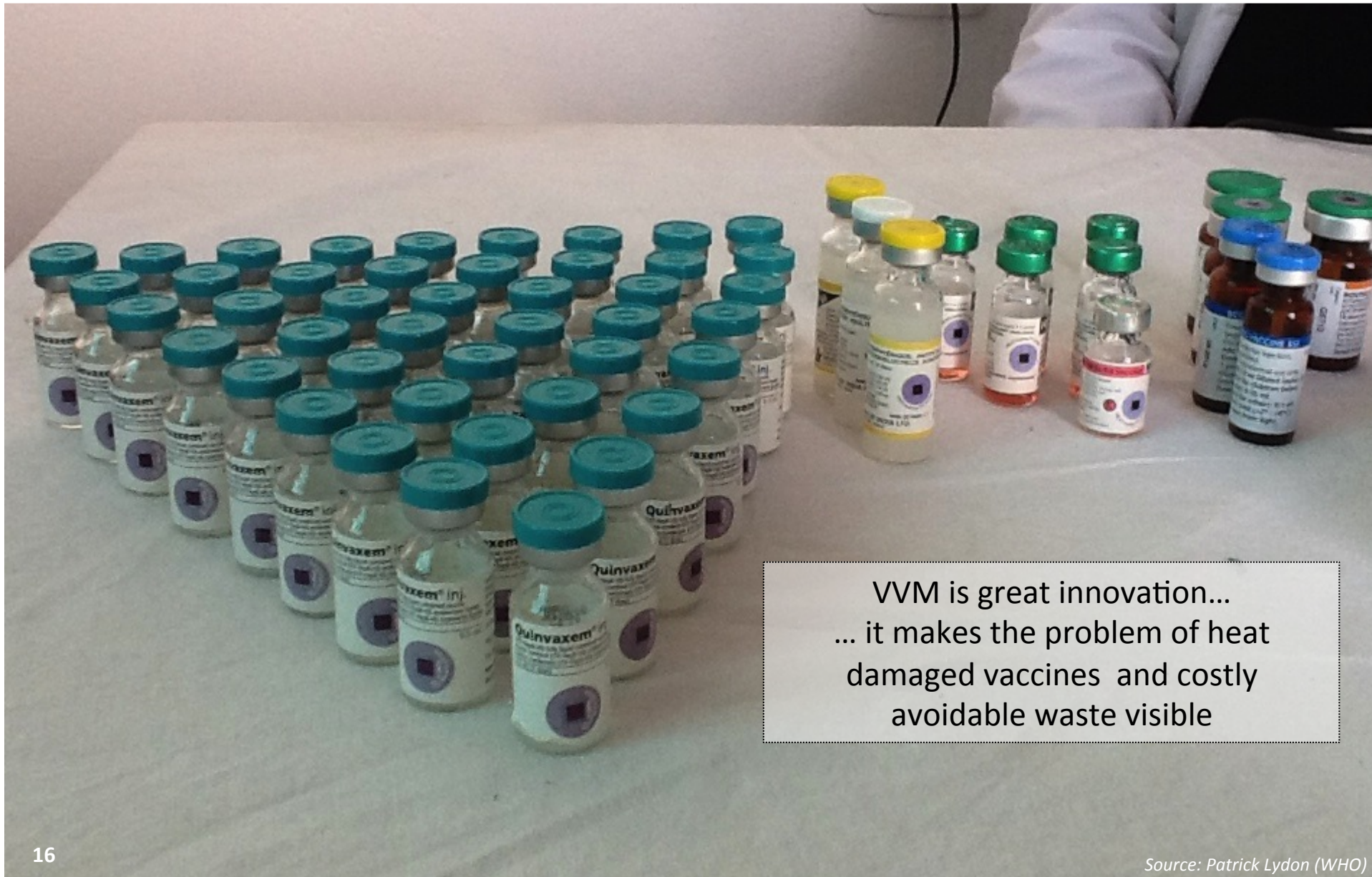
The supply chain extends all the way to service delivery



New vaccines means health workers need to carry more and more supplies

Vaccine Management

Avoidable wastage is widespread



VVM is great innovation...
... it makes the problem of heat
damaged vaccines and costly
avoidable waste visible

Vaccine Management

Use of expired and poorly stored vaccines is a concern



Waste Management

More and more syringes to dispose of safely

Rarely does the immunization waste get disposed of in a safe and environmentally friendly manner



Information Systems

Point of service data could help improve forecasts

