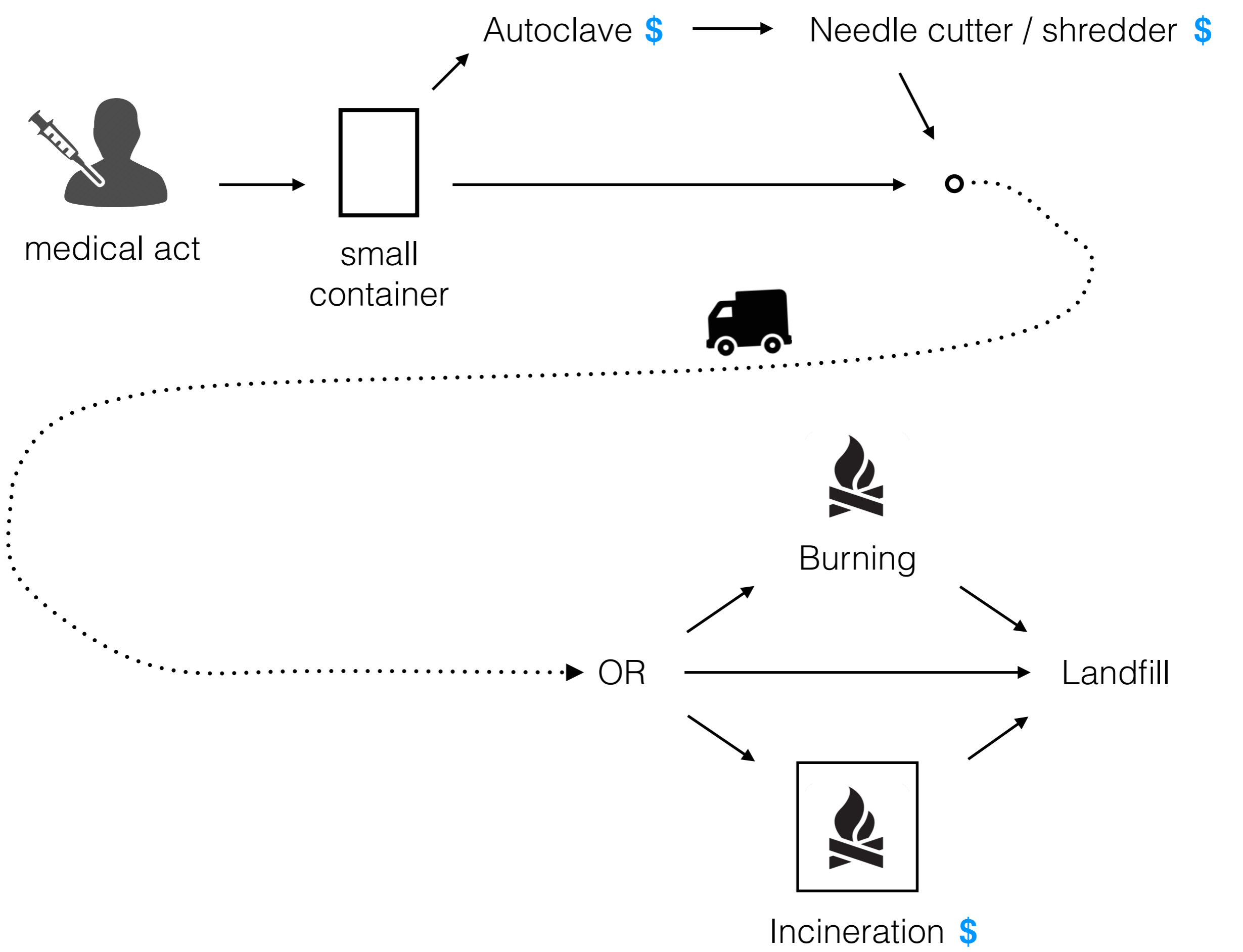


Needles Needs

Pier 85 ~ Field-Ready Hospital Waste



Needle disposal process



Existing solutions



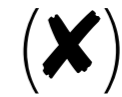
Carton box

Plastic box

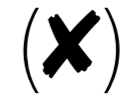
Needle shredder

Smart needle

Cheap



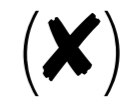
Needle re-use impossible



Safe from pricking injuries



Applicable



Current Issues

1. Availability of disposal containers but non use
2. The use of puncturable plastic bottles as containers (causing increased likelihood of pricking)
3. Two handed recapping of needles (causing increased likelihood of pricking)
4. Incineration at the wrong temperatures (toxic fumes, not disinfecting)
5. Scavengers at landfills pricking themselves on sharps
6. Reuse of needles or syringe vials
7. Resale of scavenged, possibly contaminated needles

Our hardware ideas

	Needle cutter	Needle bender	Better carton box	Better plastic box	Needle disposal out of PET bottle
Cheap	✗	✗	✓	✗	✓
Needle re-use impossible	✓	✓	✗	✓	✗
Safe from pricking injuries	✗	✗	✓	✓	✗
Applicable			(✗)	(✗)	✗

Behavioural ideas

- If the lack of knowledge of risks and safe disposal process is the problem
 - ➔ provide **stickers** for good practice and warnings of handling medical waste
- If knowledge is not the problem, how can we increase the use of the safer process by health workers?
 - ➔ **incentivise** the use of the box and proper disposal
 - ➔ create better habits for health workers

Pictogram concept

