



Reducing Maternal and Neonatal Tetanus in Chad

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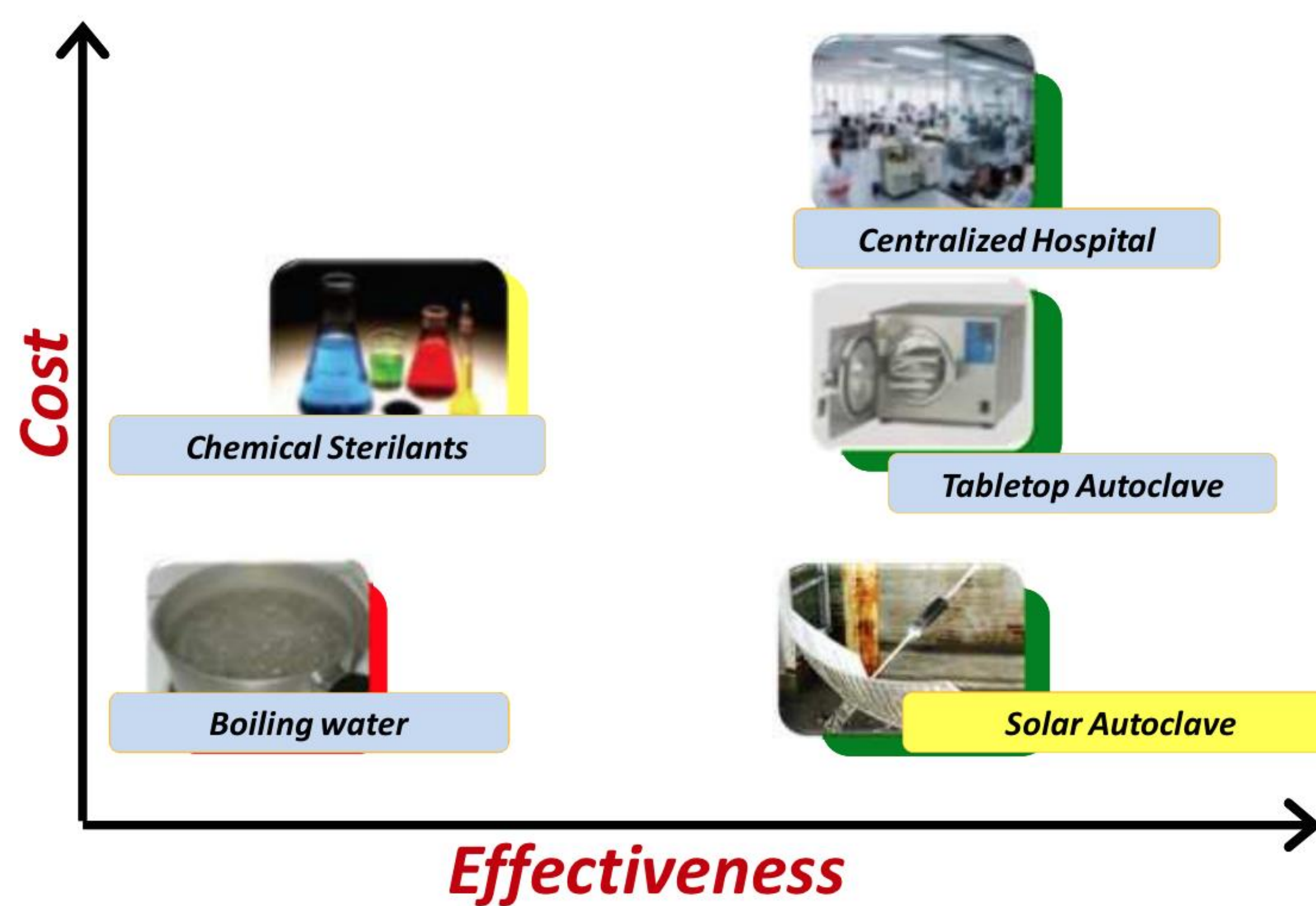
Abstract

Chad is currently the country in which infants and mothers are most at risk for maternal and neonatal tetanus (MNT). We created a program to provide education and autoclaves to sanitize tools for birth. We will measure results using a survey before and after our program is implemented. Our project is projected to reduce the incidence of MNT.

Background

- MNT: bacterial infection contracted during unsanitary birth
- Chad's vaccination rate is less than 60%
- 86% of births are unattended in Chad
- Safer Births in Chad: charity assisting Chad Midwives' Association with improving birth conditions
- Autoclave: sterilization device that requires heat and water

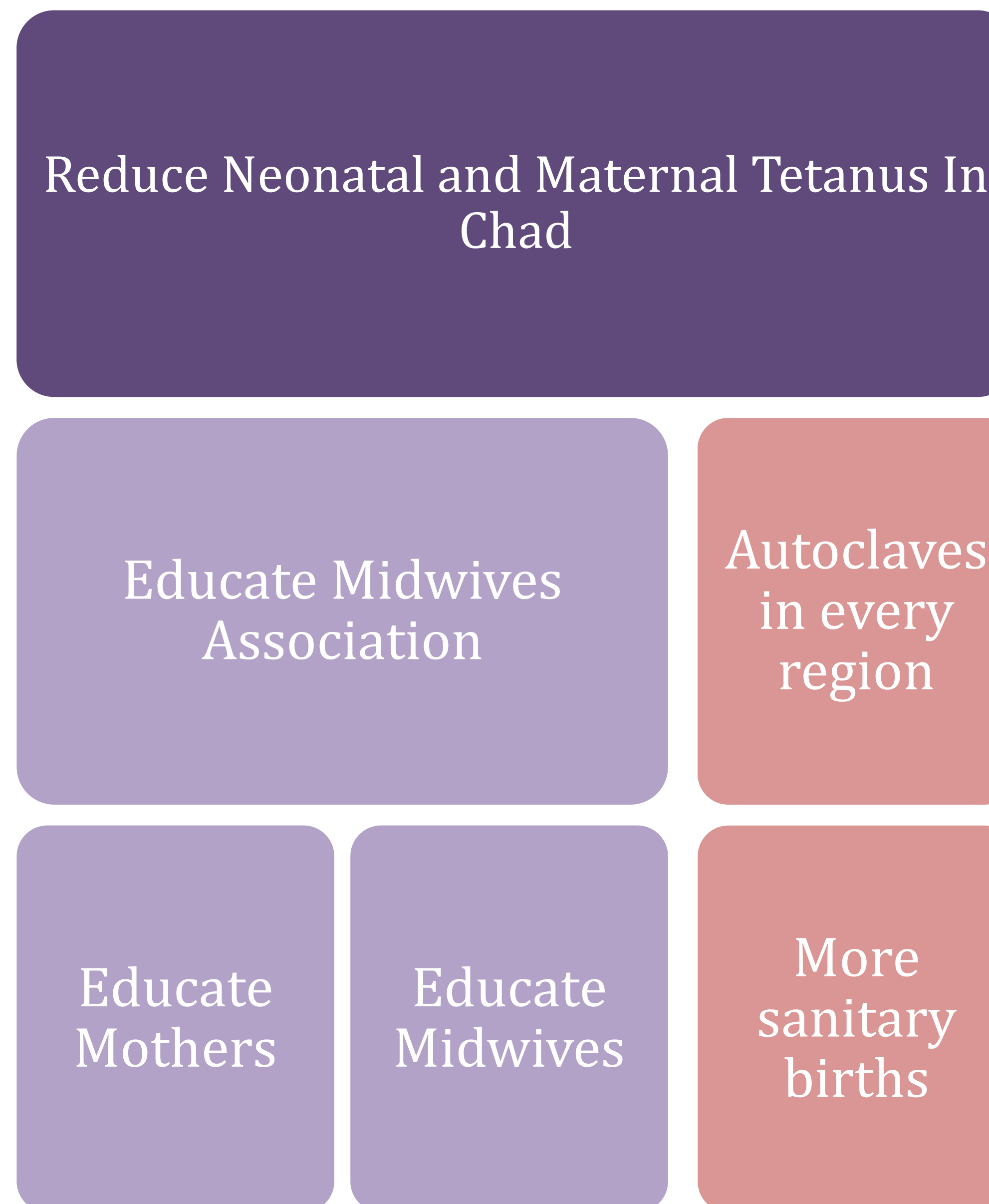
Advantages of Solar Sterilization³



Objectives

- Provide sustainable education program for mothers and midwives about dangers and prevention of MNT
- Provide two autoclaves per region of Chad
- Reduce MNT incidence

Methods



Our approach to reducing MNT is education and prevention. We will provide two solar powered autoclaves to each of the 22 regions in Chad. We created an educational program for Safer Births in Chad, who will present this program to the midwives and regional autoclave operators who will share the knowledge with mothers in Chad.

Anticipated Results

- Fewer cases of MNT
- More knowledgeable population
- Autoclaves can be used for other medical procedures

Solar Powered Autoclave

CAUTION: Reaches High Temperatures

Instructions: Use in sunny area. Fill boiler with hot water and place tools in vessel. Once indicator light comes on, run for 30 minutes. When pressure returns to 0, slowly open lid from behind then carefully remove tools using tongs.

Label for autoclaves to increase ease of use; will be in French and Arabic.

Conclusions

- Prevention of MNT reduces infant and maternal mortality rates
- Less risk associated with childbirth
- We recommend working with larger organizations with local connections to spread information

References

- http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001640/#adam_000615.disease.causes
- <http://www.saferbirthinchad.org/what-we-do/problems-and-solutions/>
- http://www.who.int/medical_devices/poster_a18.pdf