



MEDICAL STUDENTS FOR TISSUE PROCUREMENT, AN EXPORTABLE MODEL?

A 10-YEAR EXPERIENCE

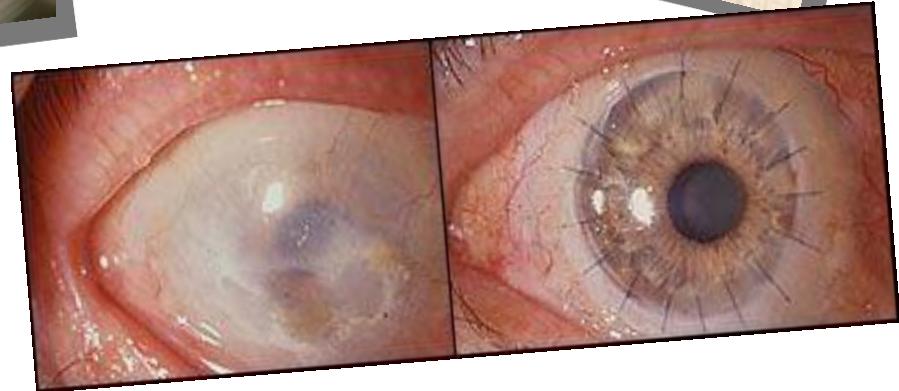
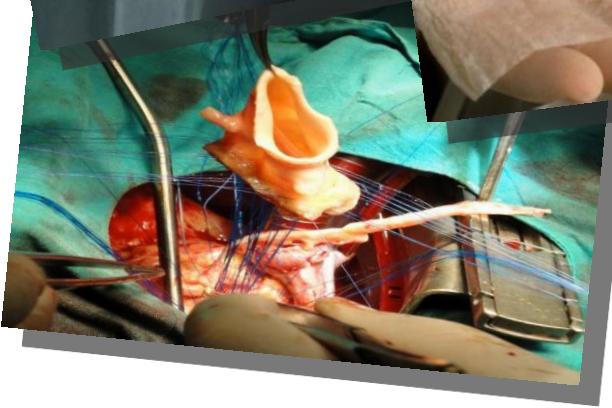
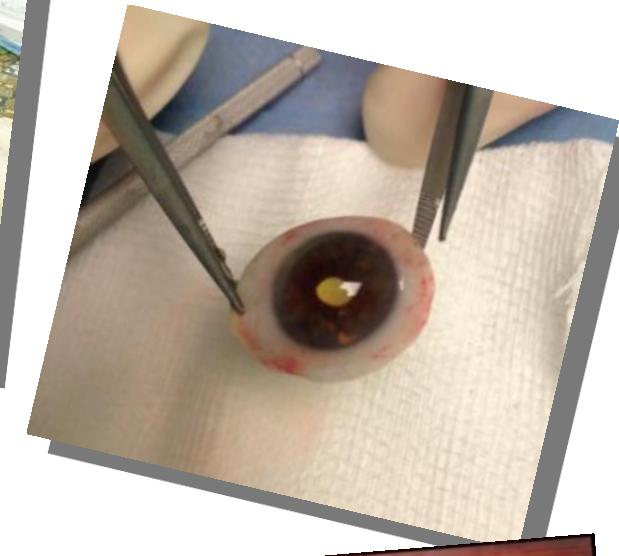
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**Transplant Coordination Service, H Vall Hebron,
Barcelona**

Objective:

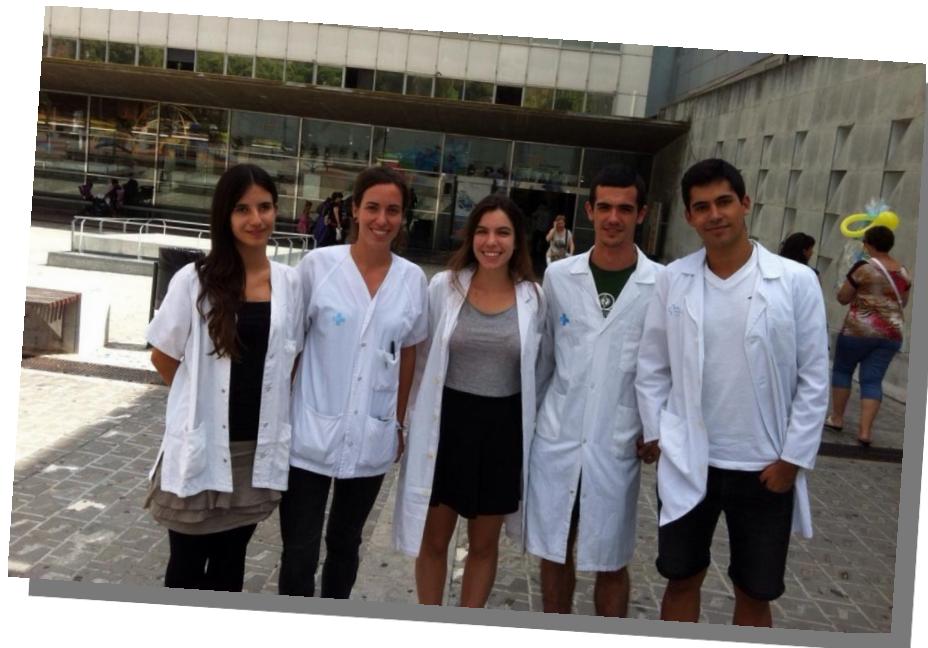
To describe tissue donation activity in University Hospital Vall d'Hebrón from 2004 to 2014 performed by medical students under senior Coordinators supervision

But first... why is it important?



...and why are we different ?

- 3rd- 6th year medical students
- In-hospital tissue coordinators (Tc)
- 24h/365 days schedule
 - Evaluating all deaths on hospital everywhere at anytime
- Senior transplant coordinator on-call (sTC)



So, our duty is:

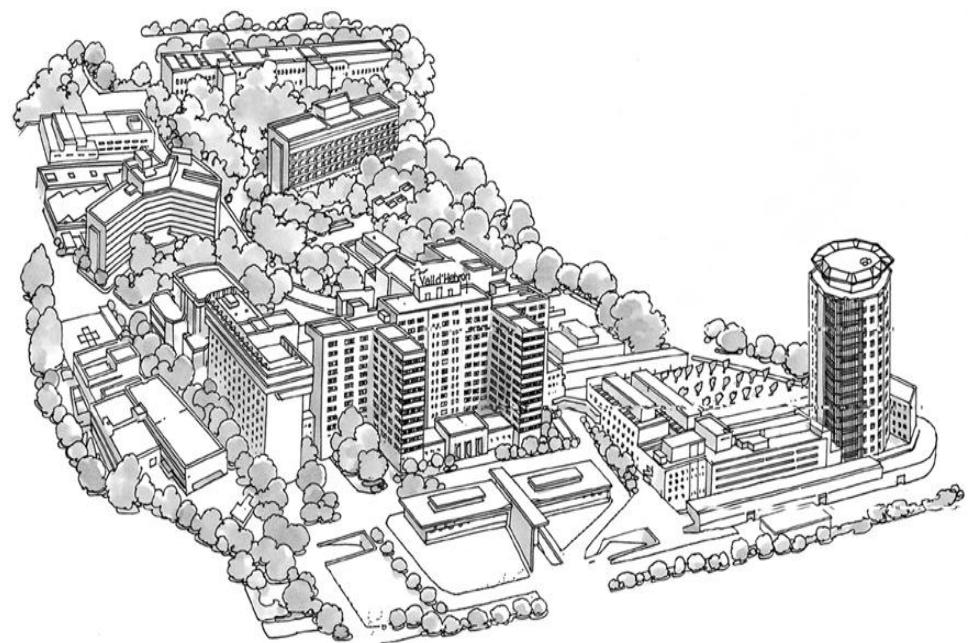
- **Tissue donation:**
 - Detection
 - First Evaluation
 - Family Approach
 - Retrieval Organization.
- **Organ donation:**
 - Support to sTC
- **Research collaboration**



Methods

- Prospective evaluation of all hospital deaths from 2004-2014.
- Specific Organizational Model...

| | |
|-----------------------|-------------------|
| Beds | 1110 |
| Staff | 7178 |
| Emergencies | 193773 |
| Operations | 50575 |
| Solid Organ Trasplant | 245 |
| Hospital discharges | 66310 |
| Èxitus | 1927 |
| Organ donors | 30 (68 pmp) |
| Budget (2014) | 511 millions € |
| Reference Inhabitants | 411.227 habitants |



Organizational Model:

Tissue donation integrated in death protocol:



Medical Staff



Nursery Staff



Administrative Staff



TC

Exodus Certification

Notification to administrative Staff

Referral

Clinical Evaluation

Tissue selection

- DETECTION:
- Name, history number.
- Death time, localization.

- Age, sex, medical past history, complaint of, progress and cause of death.
- sTC validation

- Absolute Contraindications
- Relative Contraindications

45 min

65min

Organizational Model:



Tc



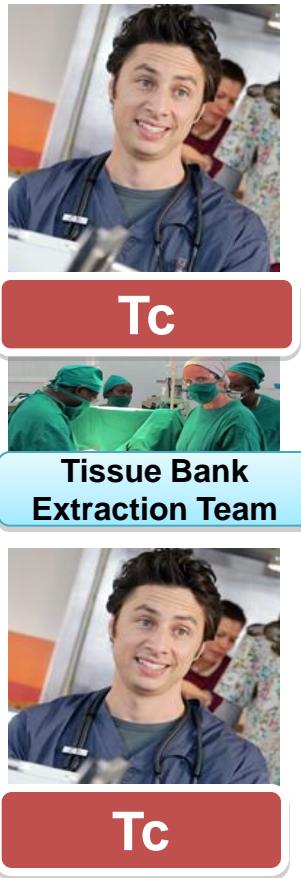
Tissue Bank
Extraction Team



Tc



Hospital lliure de tum



Family Approach

- Social Risk Interview.
- Donation Authorization.

1h 30min
(20 min)

Coroner Authorization

- If needed

2h 30min

Retrieval Logistics

Multi Tissular Extraction

- Set extraction time.
- Physical exploration.
- Blood Samples and Blood Culture.
- Extraction: supporting or performing.

7h 30min

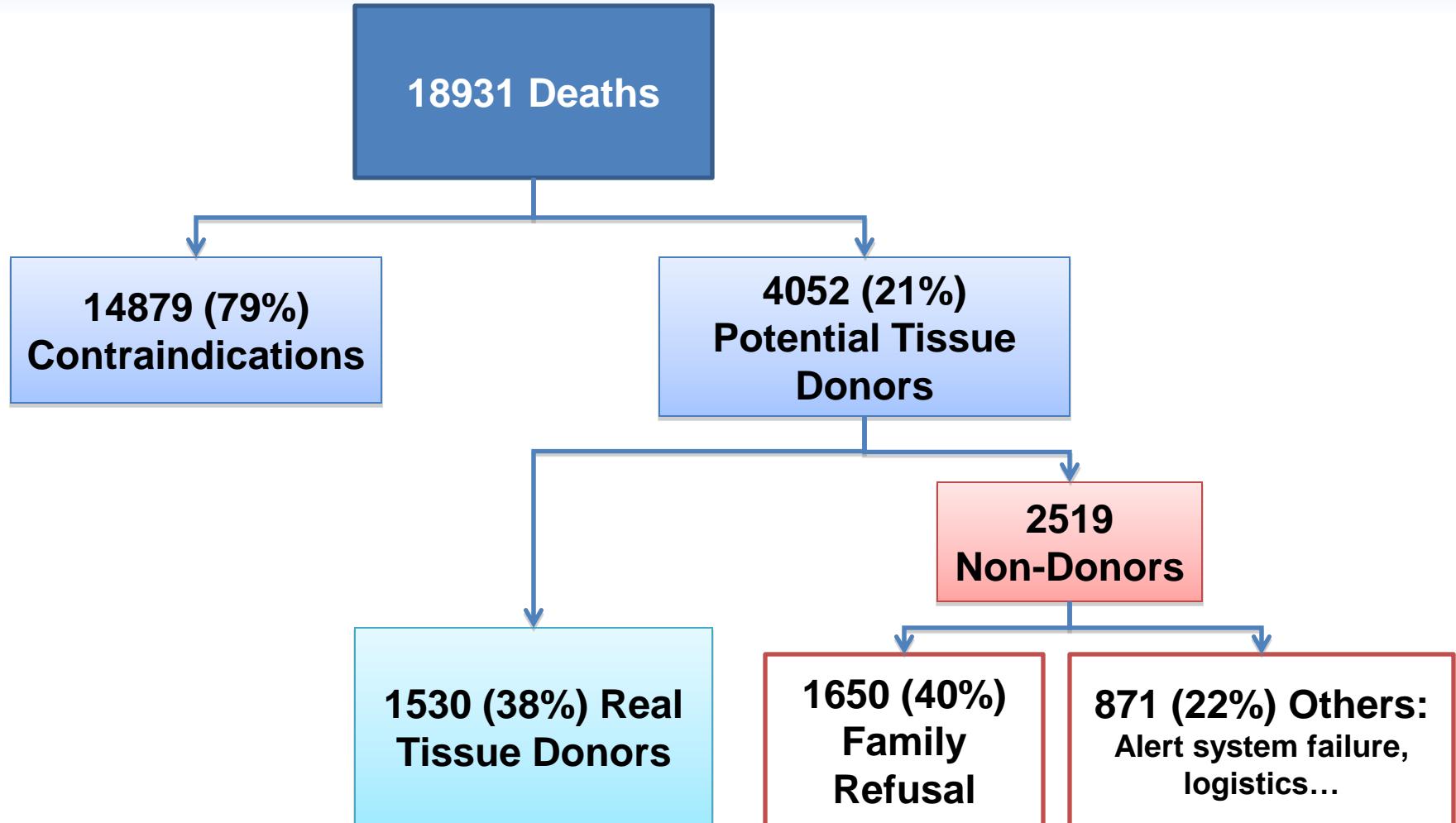
Corneal Tissue

Data saving

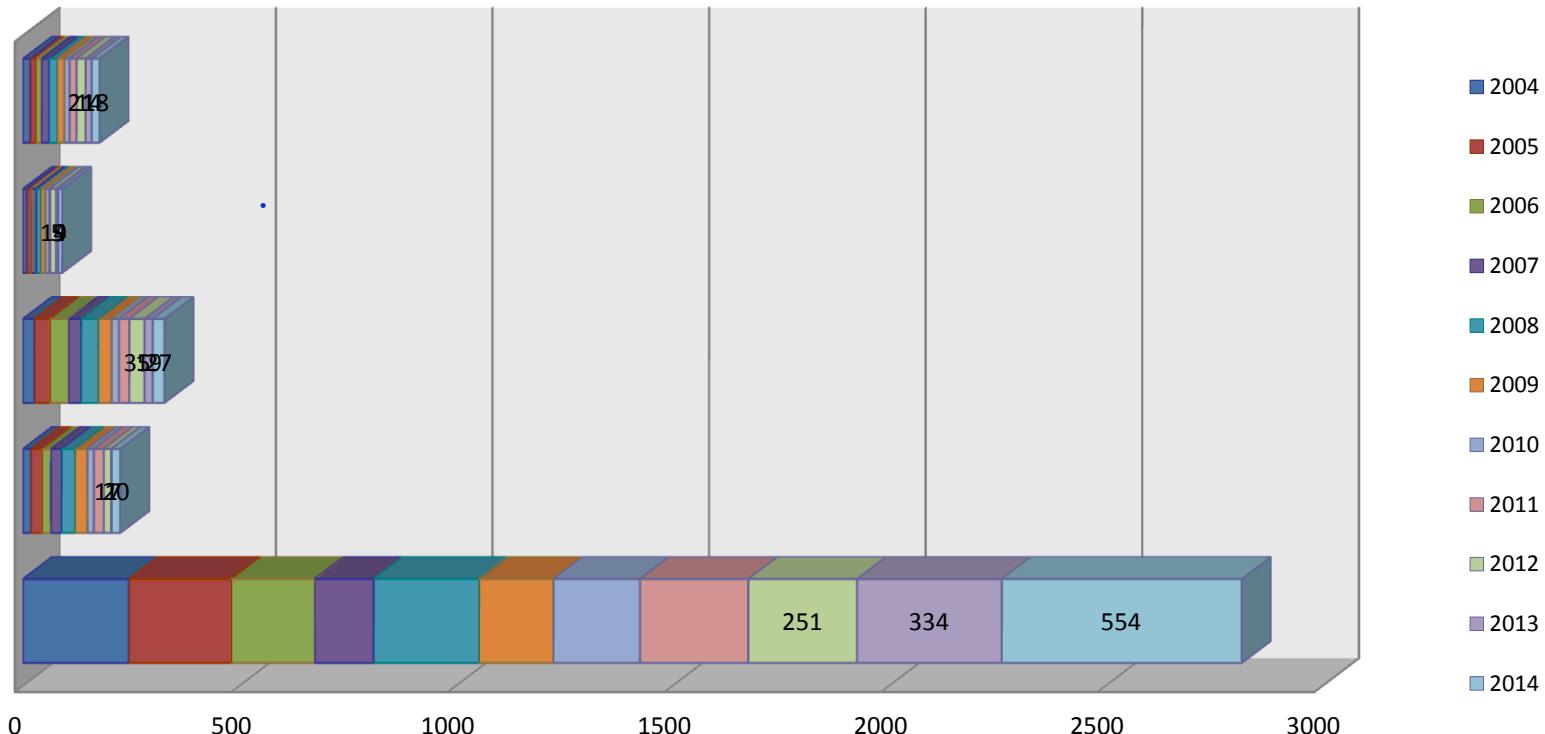
1h 40min

45min

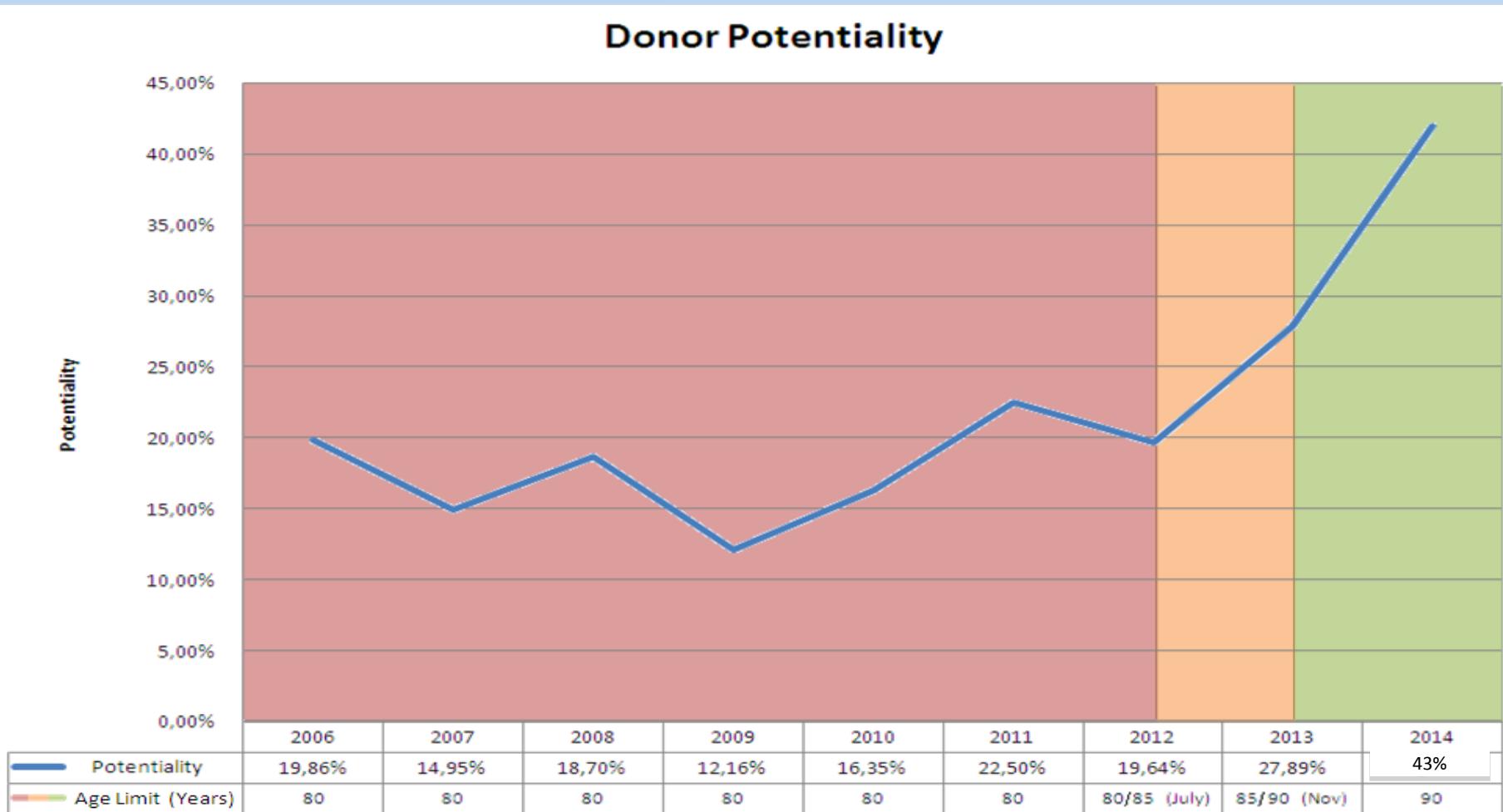
Results: Tissue donation potentiality (2004-14)



Results: Tissue retrieval



Results: Corneal Tissue Potentially



The selection criteria of cornea, vessels, skin and bone are based on the recommendations of the Spanish Association of Tissue Banks (AEBT). However, the age limitation criteria could vary significantly depending on the needs of the tissue bank at a given moment

Conclusions

- 1 out of 4 deaths could be a tissue donor in Vall d'Hebrón University Hospital

MODEL'S STRENGTHS:

- Evaluation of all deaths everywhere at anytime
- Cost-effective

MODEL'S WEAKNESSES:

- High staff turnover, every 1-2 years
- Difficulties in our duty recognition from other professionals

My own experience:

- Hospital's real life immersion
- Formation;
 - Communication on critical situations
 - Research
- Impact on donation consciousness on Medicine Faculty

Thank you for your attention

