

Blood circulation. Analysis of costs

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INTRODUCTION

To ensure that blood products retain their properties, they must be kept at a temperature of between 2 and 6 °C. During transport and distribution, they must be kept between 1 and 10 °C, without refrigerating units that exceed this temperature again (Spanish Royal Decree 1088/2005 of 16 September, Official Spanish Gazette (BOE) number 225).

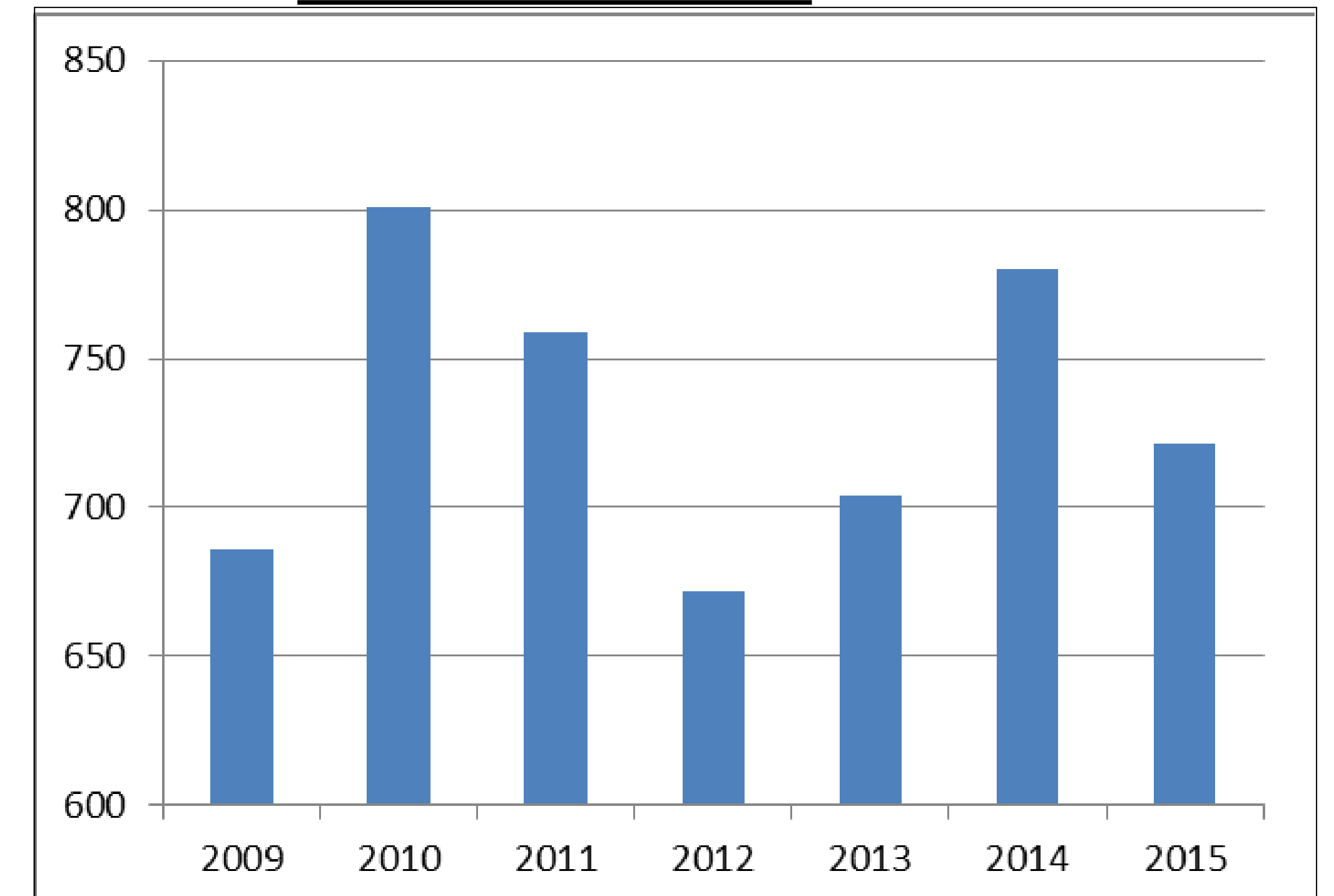
At Cruces University Hospital, an average of 732 units of red cell concentrates were thrown away per year in the period of 2009-2015. This represents 3% of the total number of units used every year.

OBJECTIVE



To **minimise** avoidable wastage of red cell concentrates by monitoring their temperature.

Discarded Units



MATERIAL AND METHODS

- Search the market for a solution / product (QTA Tracer System)
- Establish a partnership with the provider by means of a collaboration agreement.
- Design, develop and launch the blood products traceability project in heart and liver surgery departments for a duration of 1 year.
- Issue an economic report and viability study for the project. The unit price for the concentrates is €142 (Osakidetza Price List 2016).



CONCLUSIONS

- Implementing the blood products traceability system ensures that the temperature of all bags sent to surgical departments is monitored.
- From January to September 2016, 74% of the bags returned to the Transfusion Service (419/565) were recovered, with an annual forecast of 559 bags being recovered. As these are a scarce commodity, donated in an altruistic manner, it is necessary to implement measures to ensure that they are used wisely.

74% Guarantee Savings Safety Sensible Usage

ANNUAL IMPACT OF THE PROJECT

Cost of the traceability system	-14.825 €
Value of non-discarded units	79.331 €
Net saving for Osakidetza	64.506 €

- The traceability system has created a net saving of €64,506 for the Basque Health Service - Osakidetza.
- Temperature monitoring can also be applied to other blood products and other surgical departments.

