

STAGES FOR THE HEALTH METROLOGY MANAGEMENT IN SPAIN

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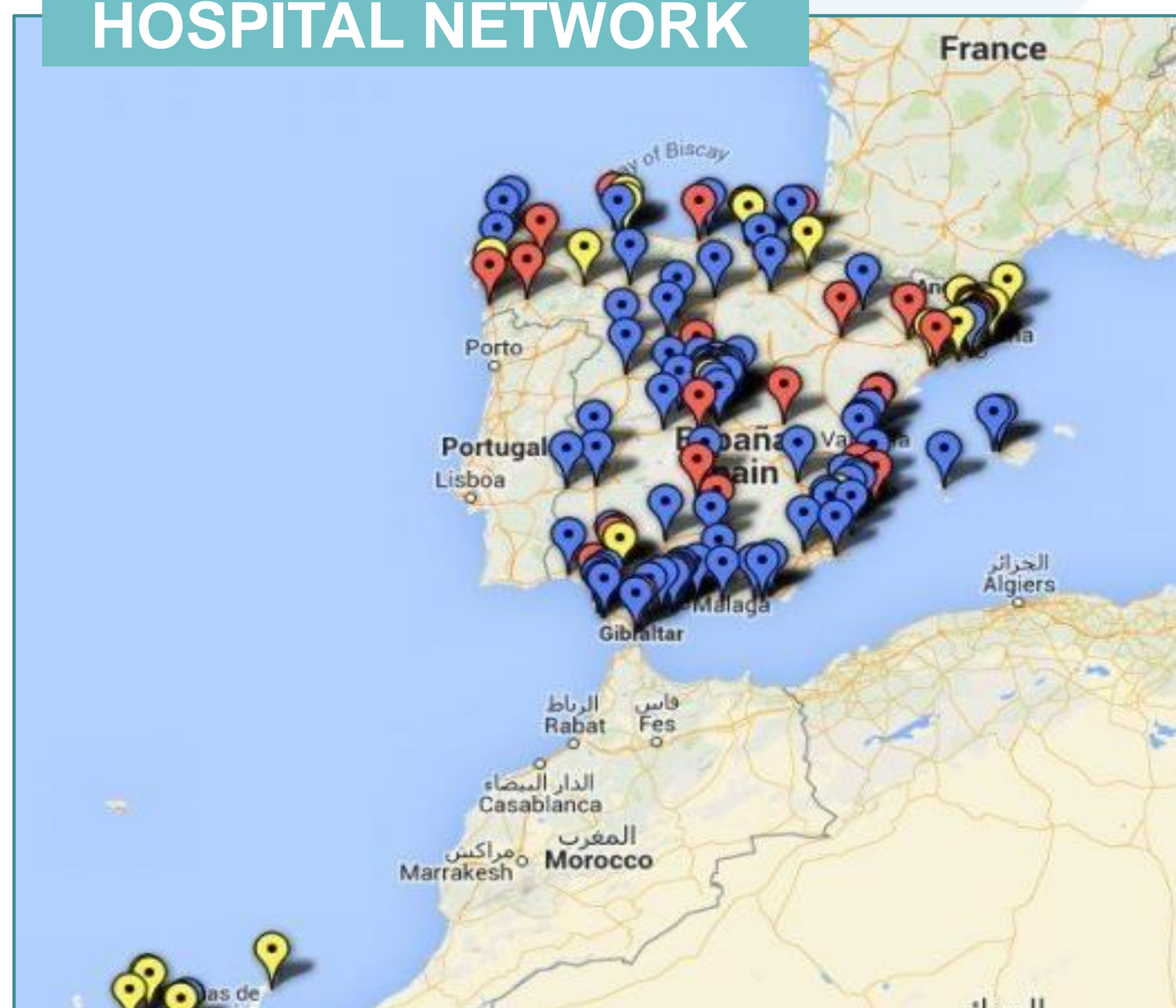
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INTRODUCTION

- In Spain we have an extensive National Hospital Network, both public and private, so it is necessary to develop a structure that allows monitoring the medical devices with a measuring function.
- In the last 10 years, we have worked hard for the achievement of a reliable Health Metrology in the Public Health System and to develop a structure that allows measurements to be traced.
- The main objective is the creation of a metrological traceability pyramid in the field of the health at whose vertex the Spanish National Metrology Institute, CEM, is found and which ensures the traceability of measurements.
- All these allows us to establish a model for Health Metrology Management that we would like to present and propose on our poster where we will give a short review on all the actions we have taken in order to find how to improve accuracy for Health measurements. We will also summarize some of the difficulties, successful experiences and we will also give some guidelines for our proposal implementation.

SPANISH NATIONAL HOSPITAL NETWORK



NEED FOR DEVELOPMENT

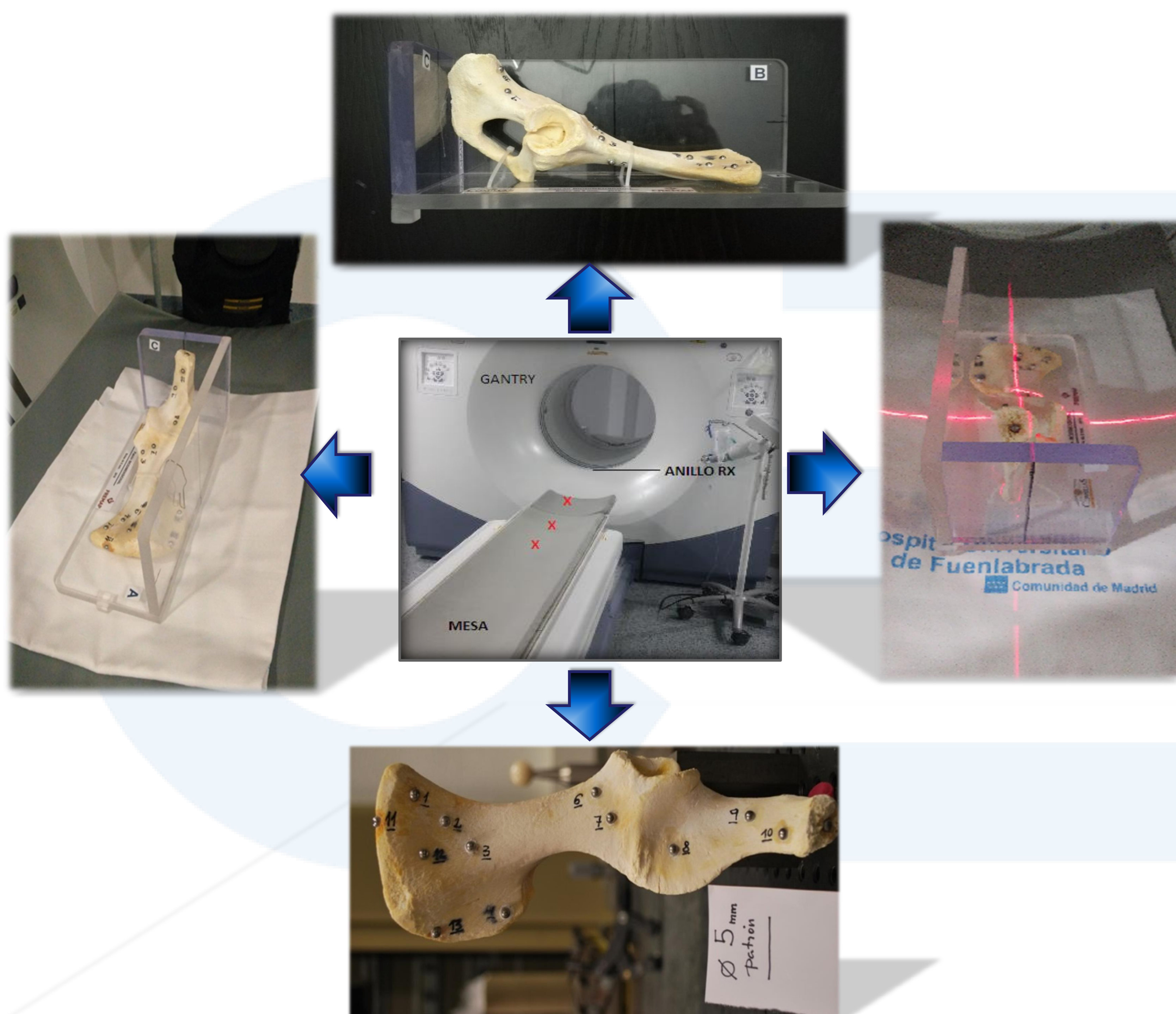


BONE COMPARISON

For this first CAT-scan comparison, each participating hospital has measured the distances among at least three different points of the standard bone, marked by 5 mm diameter metallic spheres.

The aim of these measurements were the dispersion evaluation of techniques used for dimensional measurements on bones, the evaluation of comparability among methods used and the identification of differences inter-methods and inter-hospitals, if any. All these allows to ensure the reliability of dimensional measurements.

Distances with dispersions and, measurements variability higher than 1,6 mm and 25 %, respectively, were found. This comparison will be repeated in the future including more hospitals and expanding the study to the entire national territory.

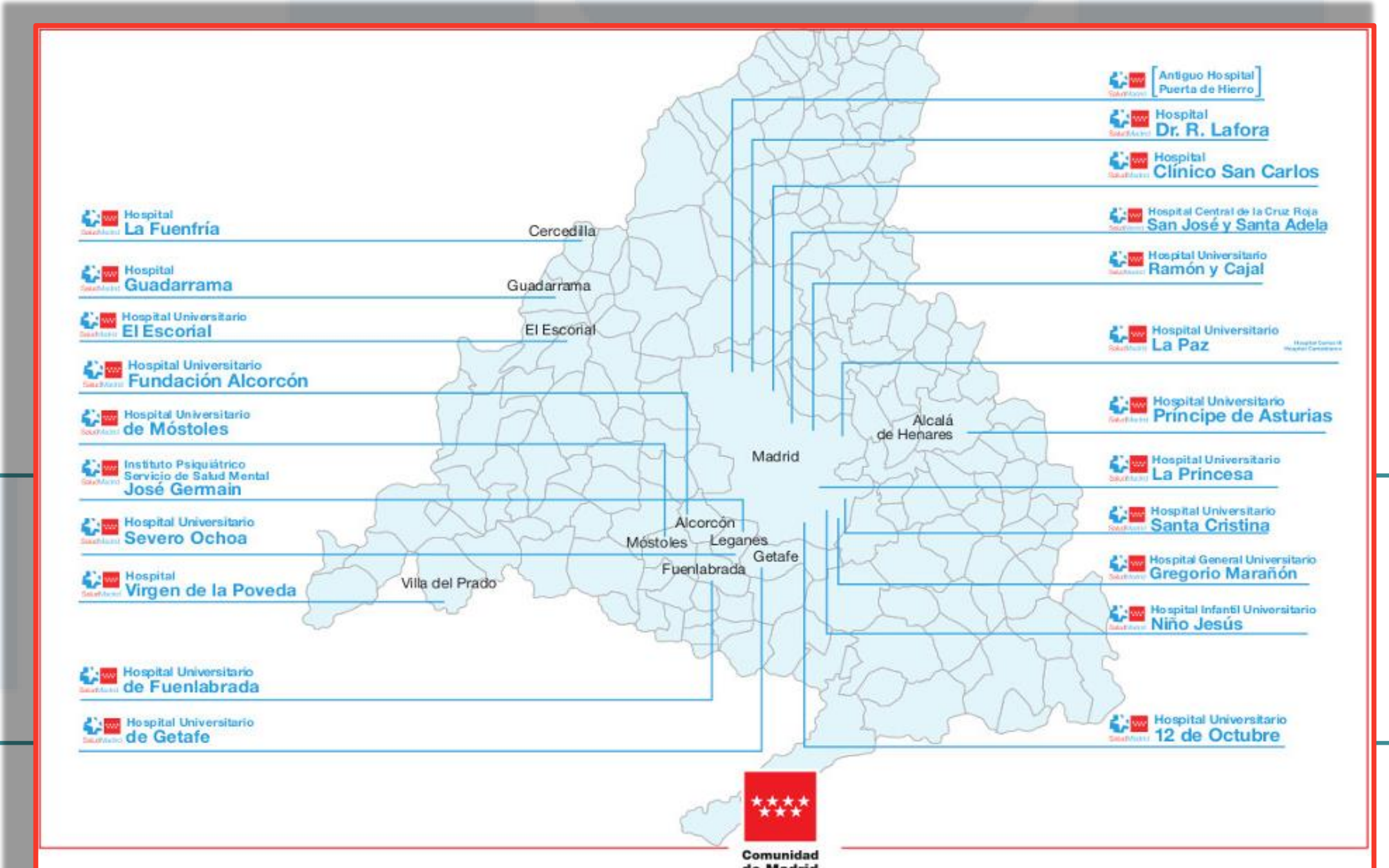


CURRENT DEVELOPMENT OF THE NATIONAL HEALTH METROLOGY PLAN

The National Plan is developed through a Project that arises from UNE, the Spanish Standardization Body (former AENOR), through National Technical Committee CTN 82 "Metrology and calibration" and working group GT04-BioMet, which deals with following issues:

- Materialized standards for the comparability of measurements, in those devices where they are not widely used;
- Inter-hospitals and Health Care Units comparisons, not only to check the technical behavior of the high precise systems, but the whole measurement procedure, including medical protocols with different quantities;
- Training strategy for health personnel in metrological topics.

BioMet has established a network of hospitals in the Autonomous Community of Madrid. Four of these hospitals have been chosen to perform a comparison on a lamb bone.



The main objective was to establish an infrastructure that allows regular comparisons to ensure the reliability of measurements, with traceability.

This shows that it is possible and there are already laboratories and hospitals that have participated.

The consideration of success lies in the realization of the comparison itself and the differences among laboratories.

NATIONAL PLAN : STAGES

First of all, a classification of medical devices and study of metrological capabilities at health centres.

Secondly, to create a national health metrology network that facilitates the organisation of comparisons.

All these allows the NATIONAL METROLOGICAL ASSURANCE

CEM

