

# PNAEQ - 10 YEARS OF PREANALYTICAL EQAS IN PORTUGAL



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## Introduction and Aim

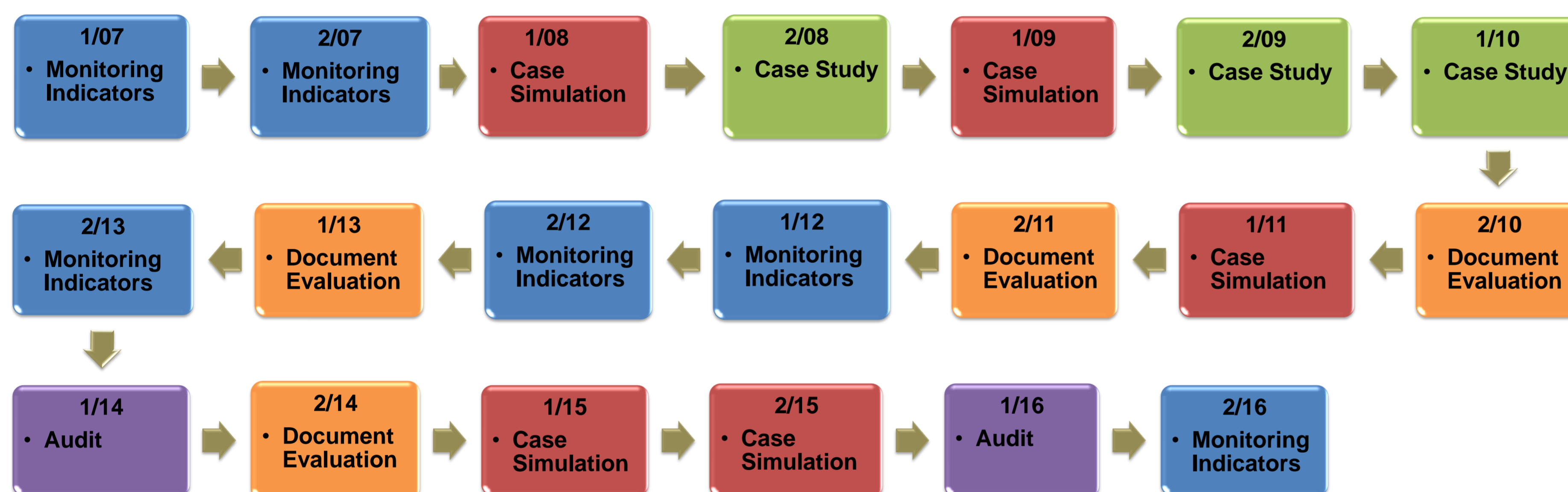
In the last 10 years, PNAEQ (Programa Nacional de Avaliação Externa da Qualidade) provided a specific program on preanalytical phase on its own responsibility. Since 2014, five more schemes were offered in this area: phlebotomy and POCT units, blood gas analysis, clinical chemistry and microbiology in collaboration with Labquality Oy, and haemostasis in collaboration with ECAT Foundation. The main objective of implementing a national and specific program on preanalytical phase is to evaluate the performance of laboratories nationwide on these matters and encourage them to improve their quality service. To reach this goal PNAEQ provided different types of assays and collected information from questionnaires and meetings with participants, in order to find tools to help on the evaluation of this important extra-analytical phase.

## Material and Methods

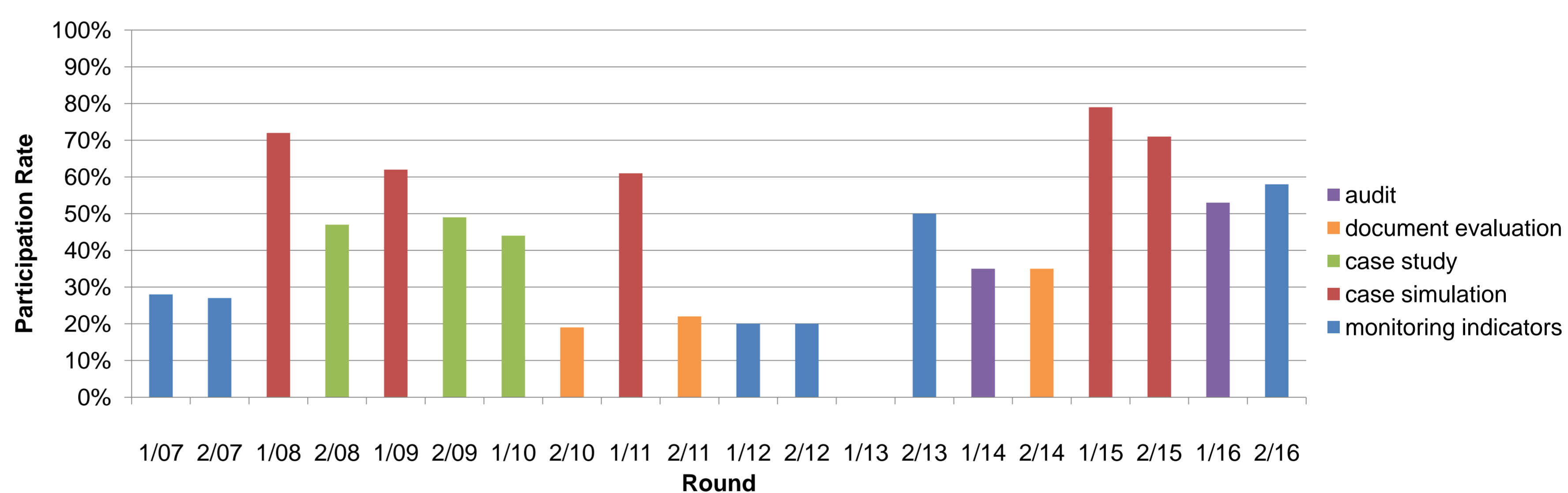
This scheme comprised 2 rounds/year, including 5 types of surveys: monitoring indicators (events quantification), case simulation (request or patient simulation), case study (samples or control material shipment: sample requirements such as transport, storage or rejection criteria; reconstitution and storage of control material), document evaluation (prerequisites in the blood collection manual, sample reception, centrifugation procedure, temperature registration, material washing procedure) and audit (vertical or presential). Since 2015, PNAEQ organizes an annual meeting on Preanalytical Phase with participants in order to evaluate their difficulties in these schemes. In October 2015, PNAEQ established a Working Group inviting participant's collaboration with 4 main tasks: selection of indicators and other tools for evaluation; monitoring the extra-analytical phases; presentation of papers in scientific journals and meetings; and participants training.

## Results

In 10 years were enrolled 126 laboratories with an average of 28 registrations/round and 45% of participation/round. Of these, 52% signed up only once and 13% maintained their registration in 5 or more years. Since 2007, were distributed 6 rounds for monitoring indicators, 5 rounds for case simulation, 4 rounds for document evaluation, 3 rounds for case study and 2 rounds for audits (Graphic 1). The highest percentage of answers received was in those types of rounds with an active role from PNAEQ such as case simulation (average of 69%). In these 10 years, rounds with monitoring indicators had an increase of average participation from 20% [1/12, 2/12] to 58% [2/16]; document evaluation from 19% [2/10] to 22% [2/11]; case study from 44% [1/10] to 49% [2/09]; case simulation from 61% [1/11] to 79% [1/15]; and audit from 35% [1/14] to 53% [1/16] (Graphic 2). Round 1/13 was an international survey distributed with the collaboration of EQALM, so the results could not be split only for Portuguese laboratories (Graphic 2).



Graphic 1: Chronology of survey types distributed per round.



Graphic 2: Participation rate and type of survey distributed per round.

## Conclusion

- ❖ The first year of the scheme had a good reception but the number of registrations decreased 14% from 2007 to 2013, doubling in 2016, mainly due to the creation of the Working Group in October 2015.
- ❖ In the Working Group meetings, there are an important discussion about indicators selection and measurement tools, national and international results, and work presentation.
- ❖ Since 2015, in annual meetings with laboratories, PNAEQ takes note of participant's difficulties in data collection, with a significant reflex in the participation rate.
- ❖ This proximity of PNAEQ to the participants is an issue to be maintained in future rounds of preanalytical phase scheme.
- ❖ PNAEQ is working on laboratories awareness trying to highlight the importance of monitoring preanalytical phase with an important focus on education, giving them tools to improve their quality service and patient satisfaction.

### References

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