

# OUTCOMES EVALUATION OF AN INTERNATIONAL WORKGROUP ON ROBOTICS: A MULTICENTRE STUDY

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## BACKGROUND AND PURPOSE

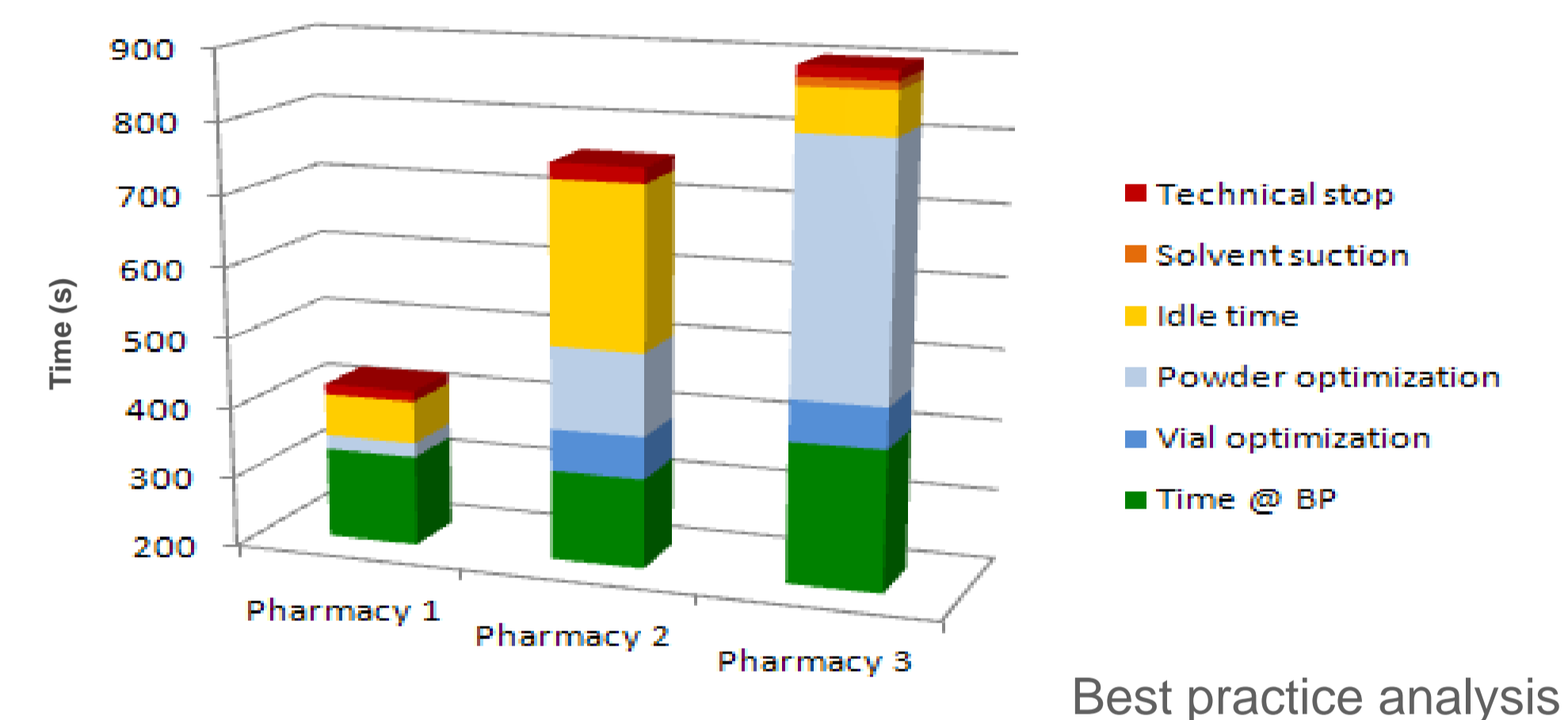


The growing demand for patients and operators safety in anticancer drugs compounding led to an increasing request of automation. As 18 hospitals have now introduced APOTECACHemo, it became necessary to set a round table where all users could share their knowledge and expertise. Therefore, in 2009 a workgroup on robotics (named APOTECACommunity) has been established. Every year its members meet to share their needs with the manufacturer and collect new ideas. The annual system upgrade is a consequence of the meeting. 160 new requirements, merged into 4 upgrades, have been collected up to now. The requirements can be classified into the following main topics: a friendlier user interface; software integration with medical health records; higher productivity.

In this study we want to assess the result in terms of productivity following the 2012-upgrade within the APOTECACommunity.

## MATERIAL AND METHOD

Five Oncology Pharmacies were selected for this study: University Hospital of Ancona, European Institute of Oncology, Romagna Cancer Institute, S.Camillo Hospital in Rome and the Cleveland Clinic. The above mentioned pharmacies have been monitored before and after the upgrade, as far as the monthly productivity with APOTECACHemo is concerned.

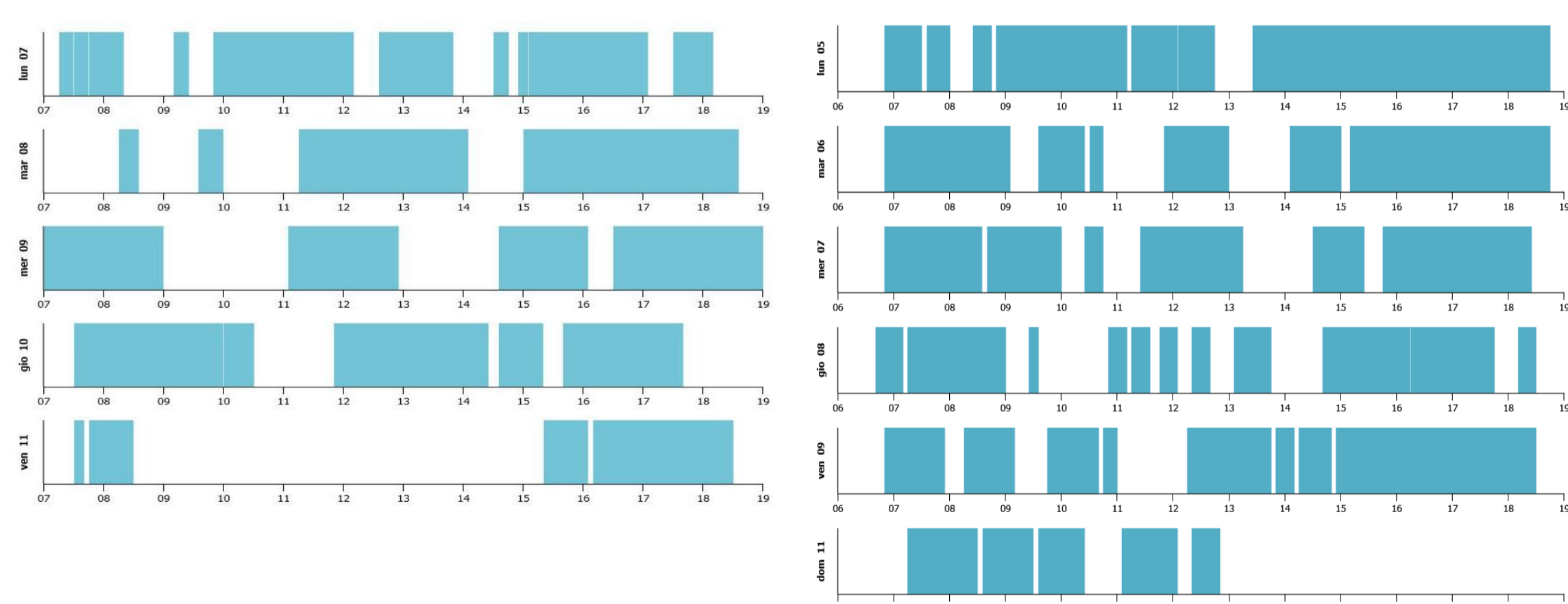


## RESULTS

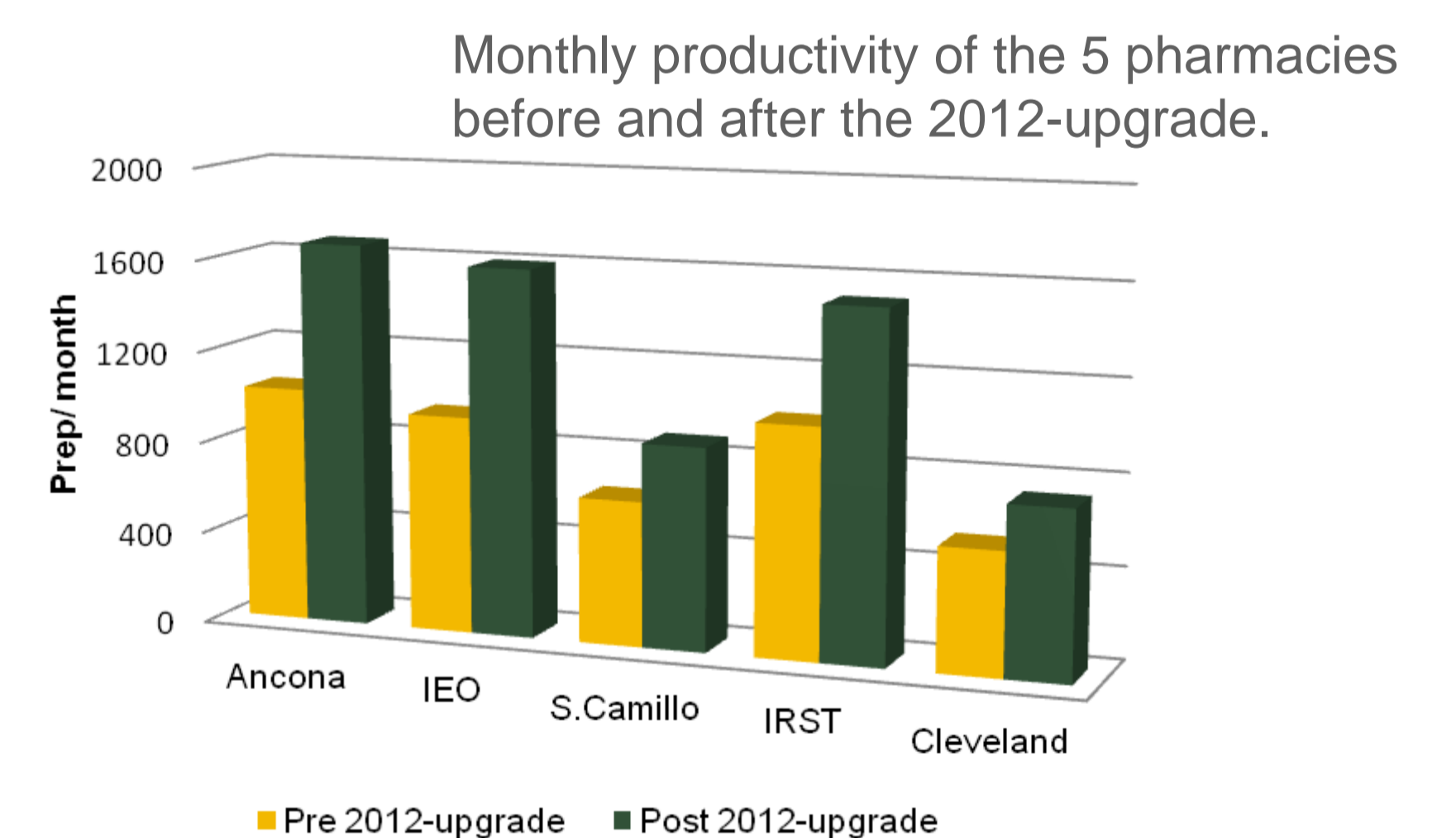
An increase of productivity is observed for all the mentioned pharmacies. University Hospital of Ancona showed an increase of 63% of the productivity. European Institute of Oncology compounded 1600 vs 945 prep/month (increase of 84%). Romagna Cancer Institute increased the productivity of

510 prep/month (58%), while S.Camillo Hospital of Rome of 250 prep/month (40%) and Cleveland Clinic of 190 prep/month (36.5%). The 5 hospitals compounded together an average of 4150 prep/month before the 2012-upgrade, while the 6400 prep/month was

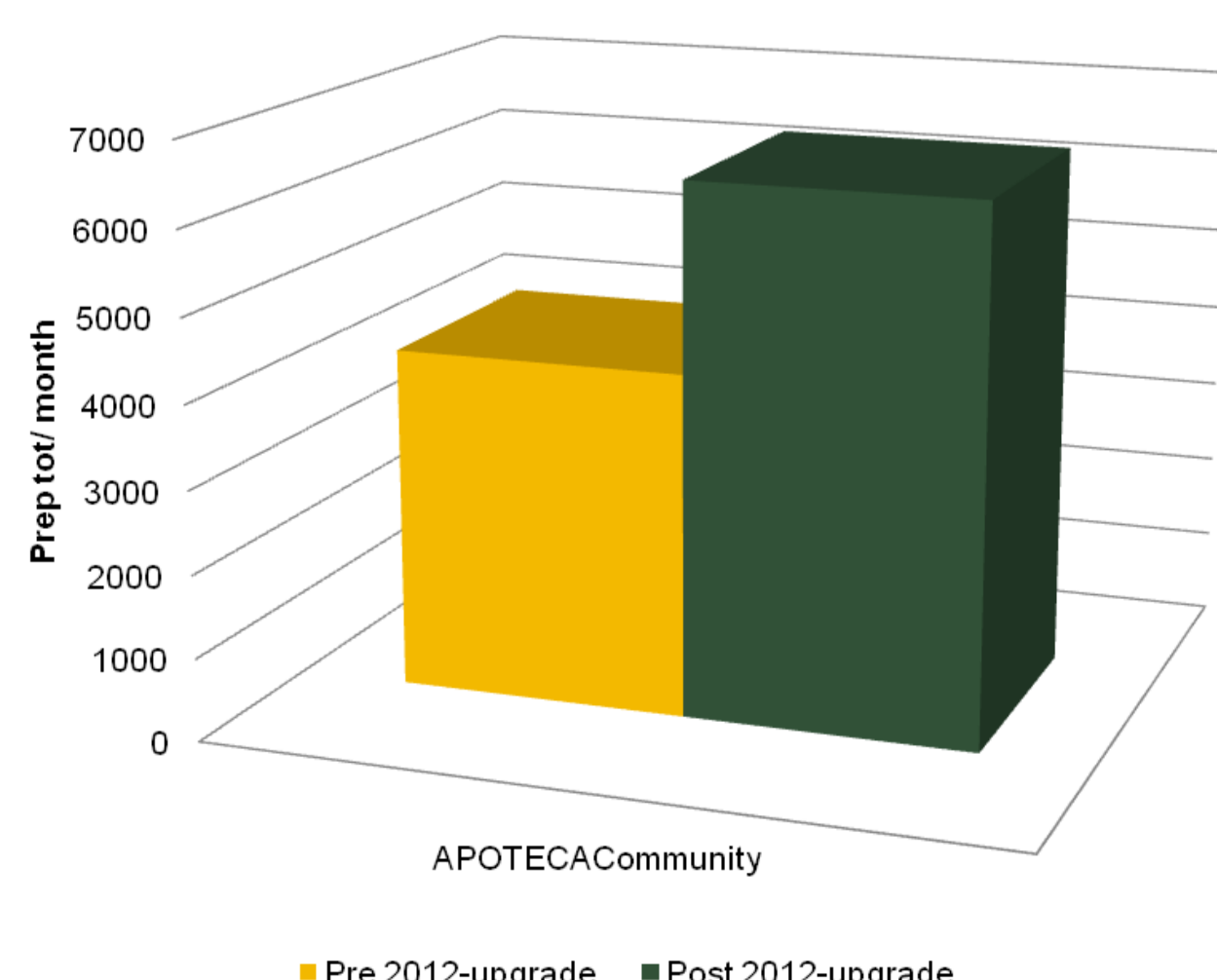
overcome after the installation. The productivity shows an average increase of 60%, ranging from 36.5% to 84%. This variability is strictly connected to the best practice match and have been analysed for each case.



Optimization of the APOTECACHemo use after the best practice analysis. The 2 graphs describe a typical work week before and after the implementation of the best practice.



## CONCLUSION



The creation of a round table where the APOTECACHemo users share experiences and discuss best practice is playing an essential role in the continuous improvement of such an innovative technology. The progress recorded after the latest upgrade in terms of productivity (+60%) is only an example of this powerful tool.

Average monthly productivity of the 5 hospitals pre and post the 2012-upgrade.