



# CHANGES IN LABORATORY UTILIZATION DURING THE COVID-19 PANDEMIC IN THE PHILIPPINES.

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## INTRODUCTION

The impact of the COVID-19 lockdowns in clinical laboratory utilization outside of COVID-19 testing in the Philippines has not been studied and local laboratory directors and managers remain largely unguided. The information gathered in this protocol will support necessary adjustments in the clinical laboratory.

## OBJECTIVES

To investigate the changes in laboratory test utilization during the COVID-19 lockdown phases (ECQ, MECQ and GCQ).

- A. To determine the number of test orders per section during the pre-COVID-19 period and the COVID-19 lockdown phases.
- B. To determine the absolute and percentage change in test orders during the pre-COVID-19 period and the COVID-19 lockdown phases.

## METHODS

A retrospective descriptive study that assessed the changes in laboratory test utilization and its significance during the COVID-19 lockdown phases.

## RESULTS

There was an overall decrease in test orders by -50.2%, -47.1% and -38.5% during the ECQ, MECQ and GCQ phases, respectively. The changes were significant during the ECQ (P-value:0.04) and MECQ phases (P-value: 0.05). The change was not significant during the GCQ phase (P-value:0.12). The serology and immunology section only had significantly decreased (P-value:0.04) tests orders during the ECQ. All other laboratory sections had no significant change in tests orders.

## CONCLUSION

Significant decreases in laboratory utilization occur during COVID-19 lockdowns that limit population movement. During this period, changes in laboratory operations and staffing changes and cross training may be done to improve efficiency.

## RECOMMENDATION

A correlation study may be conducted to ascertain the impact of the changes in laboratory utilization on patient morbidity and mortality.

## KEY WORDS

COVID-19 lockdowns, Laboratory utilization, Significant changes