

# Trends In Non-Covid Healthcare Utilization During the Pandemic in Lebanon

Alameddine R<sup>1</sup>, Bassil Y<sup>1</sup>, Barhoun J<sup>1</sup>, Asmar K<sup>1</sup>, Maskineh C<sup>1</sup>

<sup>1</sup>CCHO FZLLC, Dubai DHCC, United Arab Emirates

## OBJECTIVES

The Coronavirus disease pandemic (COVID-19) resulted in major disruption to health systems worldwide and particularly affected the delivery of non COVID-19 related care. In addition to the pandemic, the healthcare system in Lebanon was struggling with a severe financial crisis, which was jeopardizing delivery of care to patients with non-communicable diseases (NCD). The study aims at evaluating the impact of the pandemic on non-COVID healthcare utilization by NCD patients in Lebanon.

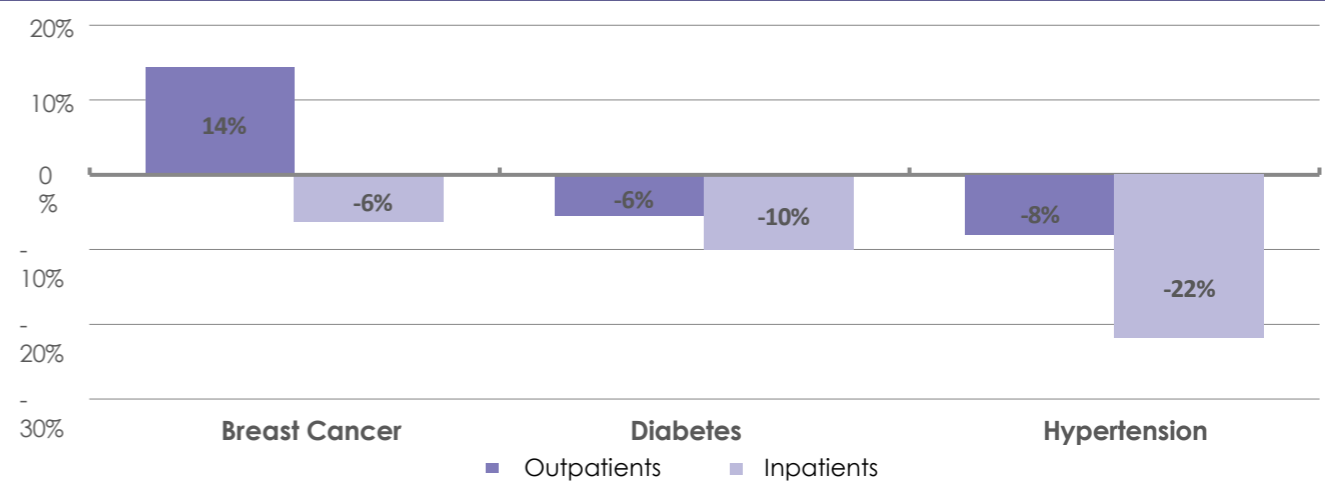
## METHODS

This is a retrospective analysis using a large unique private insurance database over three years. Patients with hypertension, diabetes mellitus and breast cancer were included. Data from 2018 and 2019, the pre-COVID period, were averaged and compared to data from 2020, the COVID period. Data was disaggregated by outpatient and inpatient services, pharmacy claims, laboratory, radiology, and physician consultation. Results were expressed as percentage difference in number of claims and total costs. Trends in hospitalization and emergency visits were analyzed.

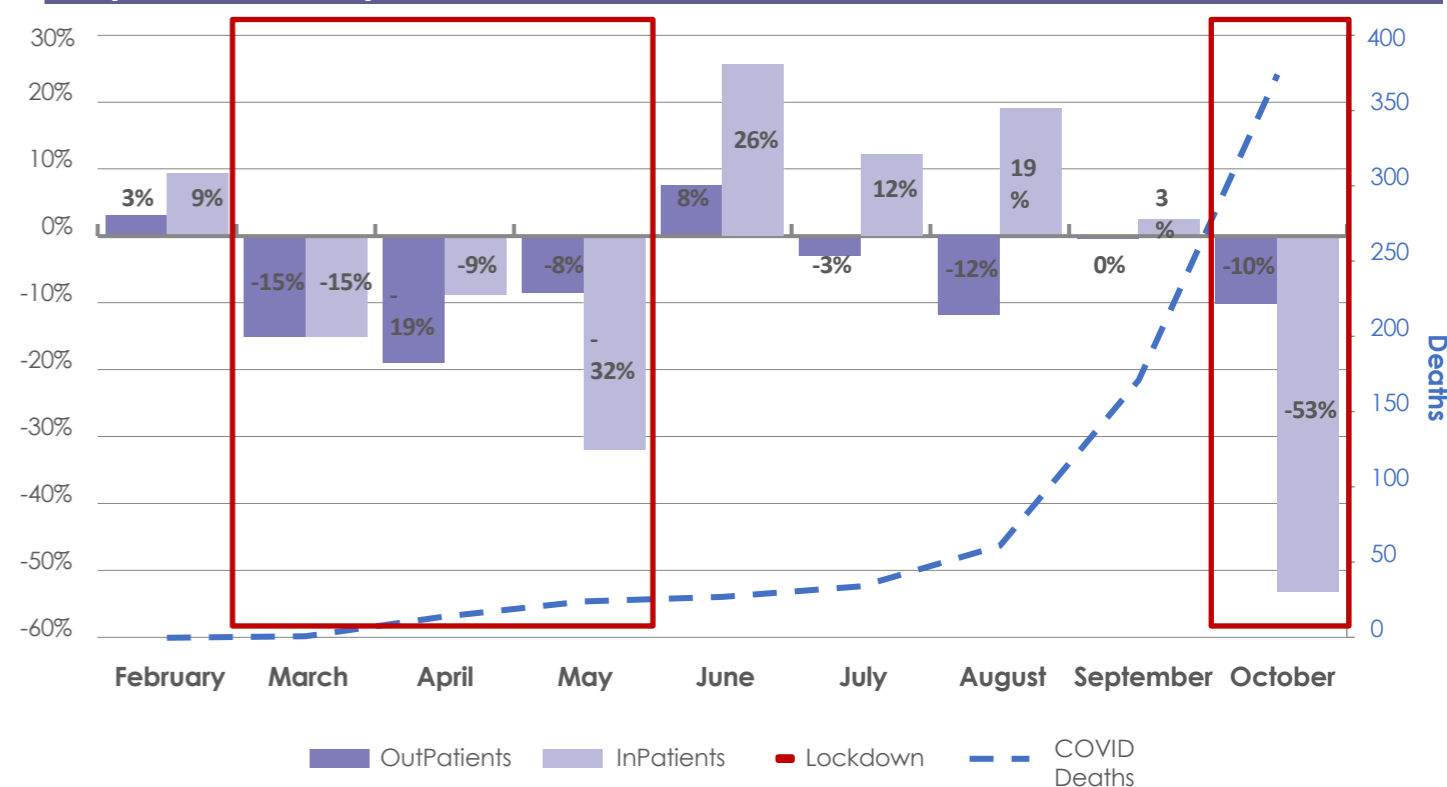
## RESULTS

Data of 14,223 patients and 654,346 claims was available between February 2018 and October 2020 (fig1). Results show a reduction in resource utilization for non-COVID care during the pandemic and specifically with the imposition of lockdown measures, as reflected by the decrease in the number of monthly claims. This reduction was observed across all service areas and was more pronounced for hypertension and diabetes care compared to breast cancer (fig3) The cost of inpatient claims, number of hospitalizations and emergency room visits for non-COVID care was significantly lower during the quarantine period. A rebound increase in service utilization was observed with the uplifting of lockdown measures. (Fig 2,4,5,6)

**Figure3: Difference in number of Yearly Claims for Outpatient and Inpatient Services by disease area**



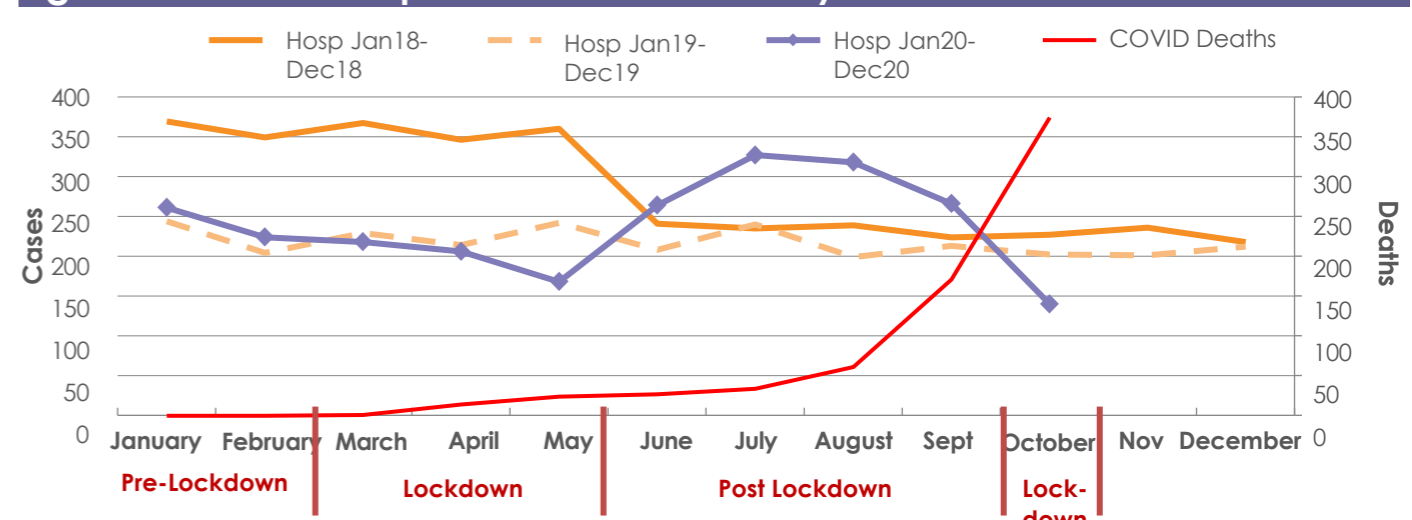
**Figure4: Difference in resource utilization (Number of Monthly Claims) for Outpatient and Inpatient**



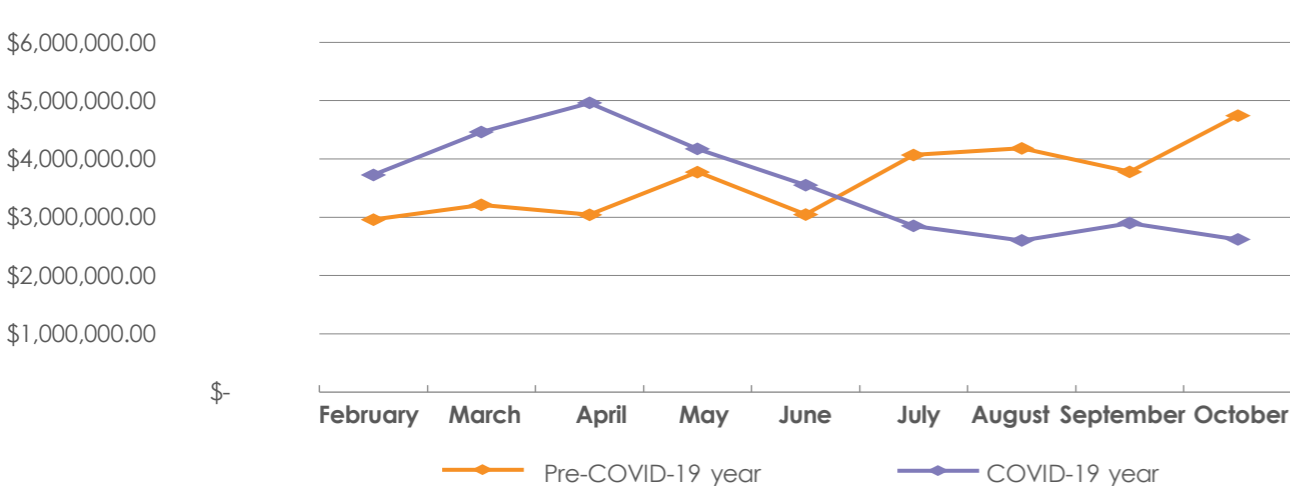
**Figure1: Population**

	Breast Cancer	Diabetes	Hypertension
2018	505	2285	6055
2019	504	2399	5742
2020	575	2091	5211

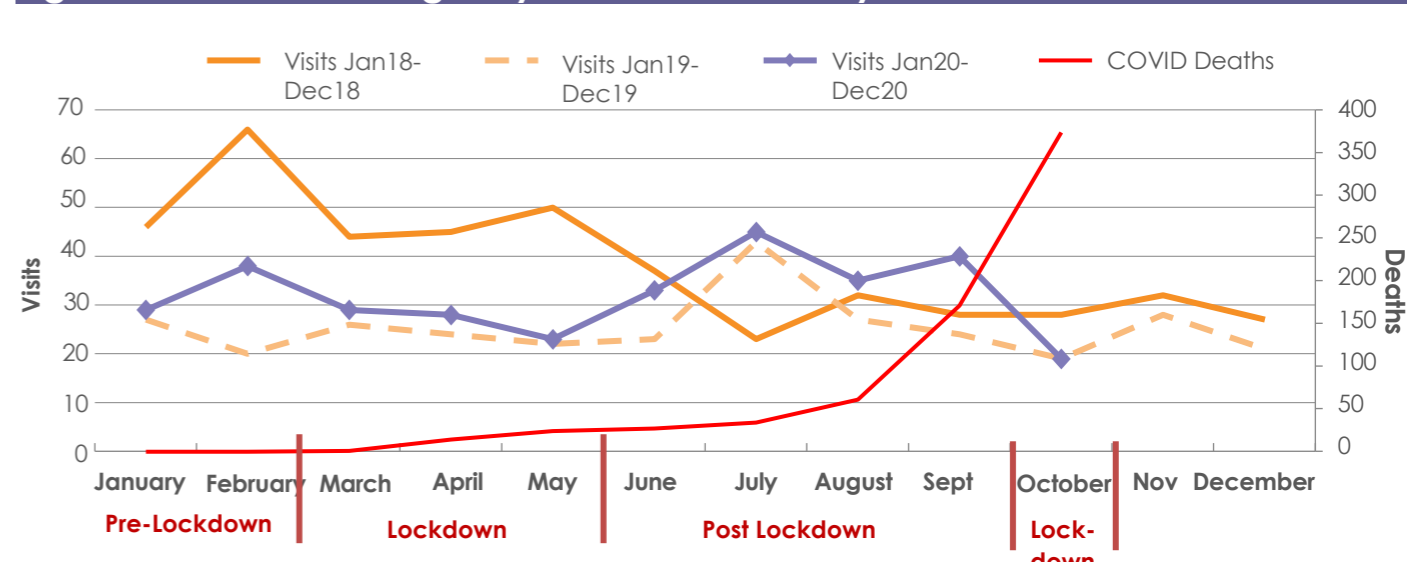
**Figure5: Trends in Hospitalization from January 2018 until October 2020**



**Figure2: Cost of claims per 1000 In Patients**



**Figure6: Trends in Emergency Visits from January 2018 until October 2020**



## CONCLUSION

Non-COVID care of NCD patients in Lebanon was severely disrupted during the pandemic. Policies to mitigate the impact of health emergencies on chronic NCD care can leverage technology and novel supply chain models to ensure continuous access to care