

Project Title

Addressing Supply Challenges During The COVID-19 Pandemic for Undisrupted Animal Care and Research Activities in Animal Facilities

Project Lead and Members

- Ms Nur A'tikah Ali
- Ms Amy Tay
- Ms Stephanie Ng

Organisation(s) Involved

SingHealth Experimental Medicine Centre

Healthcare Family Group Involved in this Project

Healthcare Administration

Applicable Specialty or Discipline

Research

Project Period

Start date: Not Available

Completed date: Not Available

Aims

- To ensure continued availability of the critical supplies
- To maintain sustainability of SEMC's daily operations and Pls' research.

Background

See poster appended/ below

Methods

See poster appended/ below



Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Operation Management, Procurement, Supply Chain, Logistics Management

Keywords

Animal Research, Critical Supplies

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Addressing supply challenges during the COVID-19 pandemic for undisrupted animal care and research activities in animal facilities

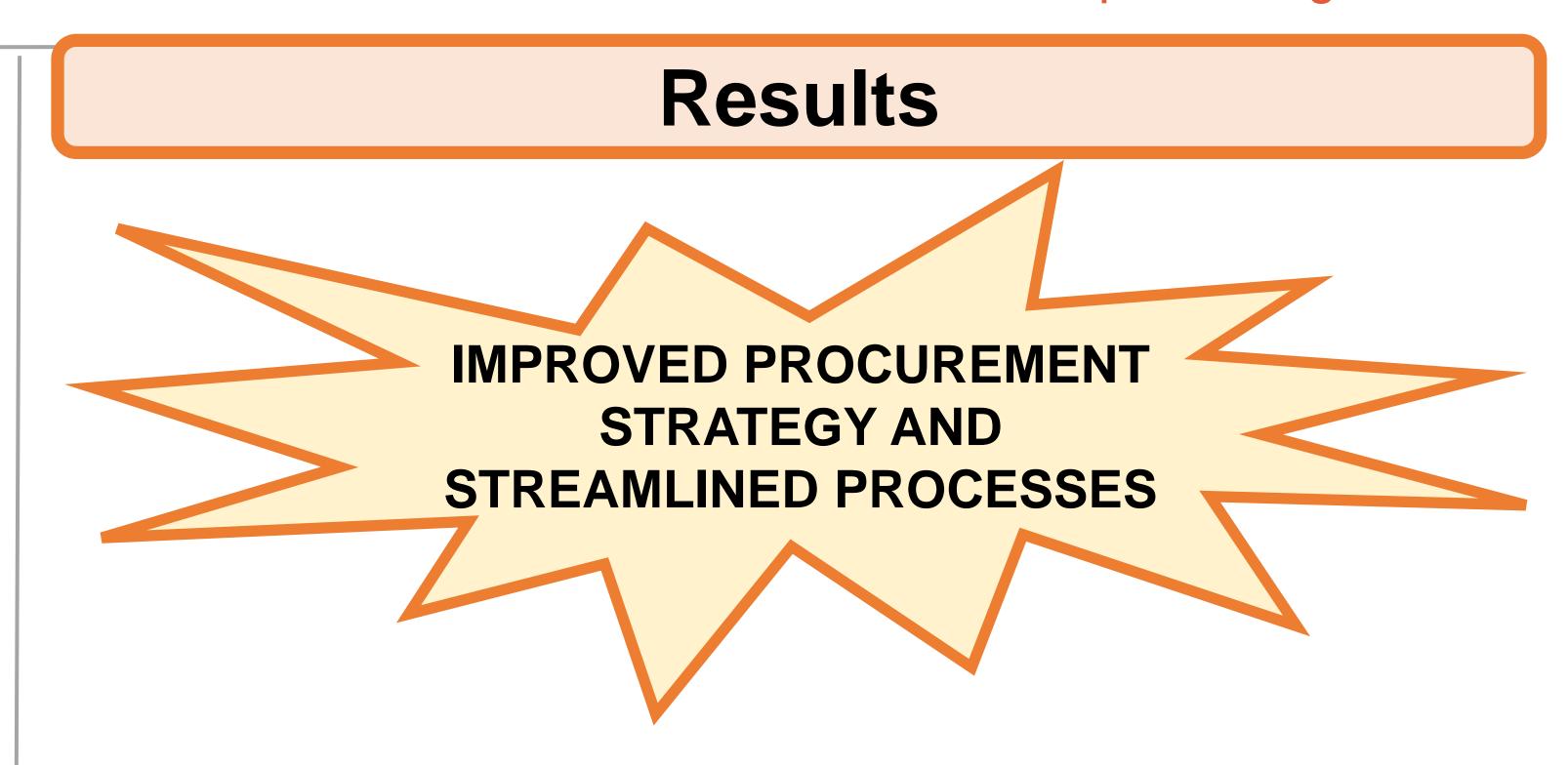
SingHealth

NUHS

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Introduction

SingHealth Experimental Medicine Centre (SEMC) provides comprehensive support services for animal research, including animal care and research support, in facilities at Academia, National Large Animal Facility (NLARF) and Duke-NUS Vivarium. To perform the support activities, SEMC has to procure and/or coordinate export/import of supplies for both animal care and research studies, such as feed, drugs and laboratory animals. Some supplies are critical as they are the basic need for animal maintenance (e.g. feed), crucial for the well-being of animals (e.g. drugs) and/or essential for research timeline (e.g. specialized animal models).



Singapore Healthcare Management 2022

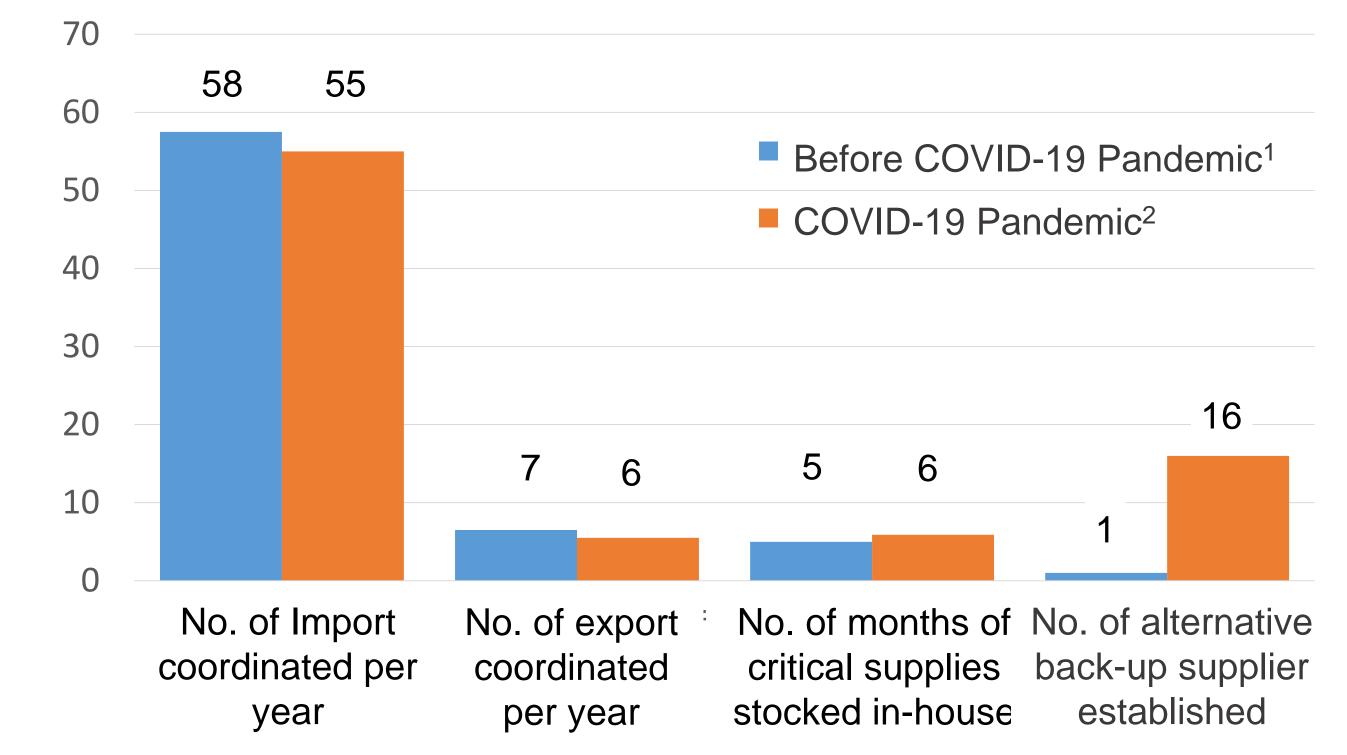
Availability of critical supplies for animal care and research

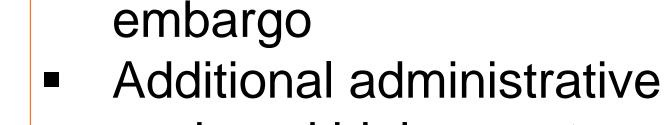
Before COVID-19	COVID-19
Pandemic ¹	Pandemic ²
 Adequate supply and options Reliable and generally on-schedule delivery / shipment 	 Limited raw materials, shortages in supply Frequent delay / cancellation of shipments / flights Supply disruptions due to travel restriction and flight

During the pandemic SEMC was able to,

- Ensure sufficient stock of critical supplies
- Perform import and export of animals and bioresources as required by PIs' research, and

Sustained research support activities despite pandemic challenges





work and higher cost

¹ Period between Financial Year (FY) 2018 and 2019 (April 2018-March 2020) ² Period between FY 2020 and 2022 (April 2020- March 2022)

Aim

To ensure continued availability of the critical supplies
 To maintain sustainability of SEMC's daily operations and PIs' research

Methods



Adjusted the **ordering timeline** of critical supplies & added buffer stock

SEMC's

procurement

strategy

during

pandemic



Maximized the use

of supplies in stock,

including seeking

confirmation from

suppliers on

extended use period

beyond the printed

shelf-life

- Ensure **availability** of local supply of **domestic pigs** for scientific purposes.
 - Import of pigs from overseas parentstock supplier was restricted in the past years.
 - Permission was sought to use F1 generation to continue local production.
 - Opportunity was seized to import breeders in early 2022 once flights were permitted.

Explored alternative local sources with warehousing capability as backup supplier and to circumvent delays

> Sought permissions for **special use of existing supply** (eg: breeder animals, veterinary drugs)

Promptly **initiated regulatory processes** for shipment upon securing flights

Conclusion

The pandemic has greatly impacted supply chain globally, which threatened the availability of critical supplies and services for animal care and research. SEMC managed to **sustain** its daily operations and **continue supporting research activities** in all the facilities despite the challenges brought by the pandemic. This has allowed life-savings research using animals to continue, **preventing disruption** in the progress of medical advancement