

COVID-19 PANDEMIC Impact on Hospital Operations

How the first two waves of the pandemic impacted Ontario hospitals' staffing utilization.





Medicine Inpatient

Ontario hospitals experienced substantial operational challenges during the first year of the COVID-19 pandemic in Canada. The following report highlights changes in staff utilization, patient volumes, and staffing skill mixes in the past five years and more prominently during FY2020-21 when hospitals were most impacted by the pandemic. The report also highlights overtime and sick-time trends that were in some instances exacerbated by the pandemic.

The information is taken from the Benchmark Intelligence Group (BIG) Healthcare dataset comprised of over 125 Ontario hospitals' MIS Trial Balance files. We have summarized the MIS Trial Balance files from FY2016-17 to FY2020-21. The third, fourth, and Omicron waves of the pandemic occurred during FY2021-22; data for these periods will be available in July 2022. ¢

8

7

6

5

4

3

2

1

0

5.58

0.43

1.96

3.18

16-17

Registered Nurse

5.55

1.91

3.12

17-18

Worked Hours per Patient Day

MEDICINE INPATIENT

ONTARIO HOSPITALS

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

Datient Days in Millions

6.50

0.74

2.43

3.32

20-21

5.66

0.59

2.14

2.93

19-20

Medical inpatient worked hours per patient day increased by

Registered Practical Nurse

Worked Hours per Patient Day

Ontario hospitals had stable worked hours per patient day from FY16-17 to FY19-20. In FY20-21, worked hours per patient day increased by 15%. This increase of course coincided with the COVID-19 pandemic. Numerous reasons could help explain the increase including decreased patient days in medicine units (7%) without a corresponding change in staffing levels, redeployed staff to other units, and increased staffing to accommodate higher acuity COVID-19 patients.

5.46

0.55

1.96

2.94

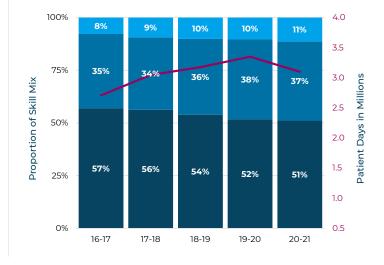
18-19

in the first year of the

COVID-19 pandemic



While worked hours per patient day remained stable prior to the pandemic, the **proportion of worked hours attributed to RNs decreased by 6% over the past five years**; the difference was made up of both RPNs and to a greater extent by unregulated/ PSW staff.



Unregistered/Personal Support Workers

Patient Days

The proportion of Medical Inpatient hours worked by RNs decreased

over the most recent five years





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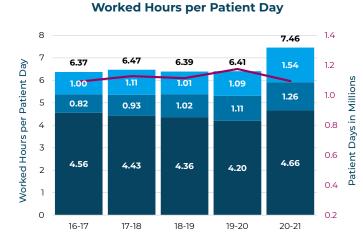
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MEDICINE INPATIENT

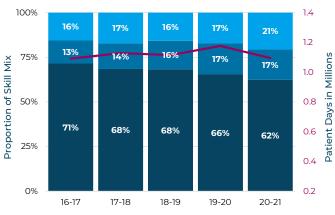
Teaching and large community hospitals experienced the greatest increase in worked hours per patient day during the pandemic. Teaching hospitals increased worked hours per patient day by 1.05 hours (16%), and large community hospitals increased by 1.05 hours (19%). Both experienced a decrease in patient days by 7% and 8% respectively.

Both hospital types also increased the proportion of unregulated staff (e.g. personal support workers) in their skill mix during the pandemic with a corresponding decrease in RNs.

TEACHING HOSPITALS

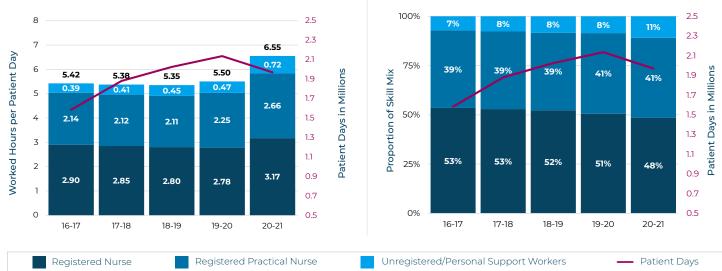


Proportion of Skill Mix per Patient Day



Proportion of Skill Mix per Patient Day

LARGE COMMUNITY HOSPITALS



Worked Hours per Patient Day

Worked hours per workload is a standard measure of operating efficiency. A functional centre's total worked hours is divided by the functional centre's workload (patient days, cases, or visits). Medical staff hours are not included. This report uses the Median performance level.



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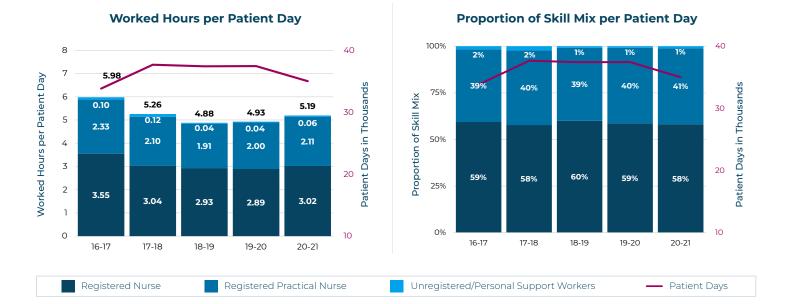
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MEDICINE INPATIENT

SMALL HOSPITALS

Small hospitals had a different trend in worked hours per patient day than Teaching and Large Community hospitals. **Compared to 16/17,** and even in the pandemic year, worked hours per patient day was lower than the other hospital types.

During the pandemic **small hospitals did not experience the same level of staffing change on medicine units.** Worked hours per patient day increased by 5%. The decrease in patient days was similar to other hospital types at 7%. Skill mix has remained relatively steady since 16/17.



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MEDICINE INPATIENT

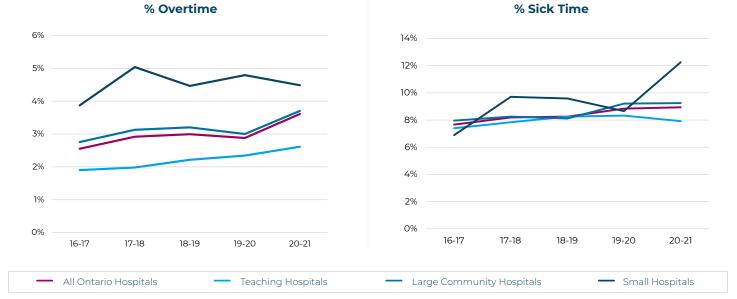
OVERTIME & SICK HOURS

Overtime Hours

Ontario medicine units overall experienced an increase in overtime hours as a percent of worked hours during the pandemic from 2.5% to 3.6%; an approximately 25% increase from 19-20 to 20-21. **This increase was largely faced by large community hospitals** with an increase from 3.0% to 3.7%, representing a 23% increase in overtime during the pandemic. Teaching hospitals experienced a 12% increase, whereas small hospitals experienced a 6% decrease.

Sick Hours

Sick time across Ontario medicine units increased from 7.6% to 8.9%; approximately a 1% increase from 19-20 to 20-21. **Small hospitals faced the greatest increase** from 8.6% to 12.3%, representing a **42% increase in sick time during the pandemic.** This follows an increasing trend in sick time for small hospital over the past five years. Teaching and large community hospitals were relatively stable in sick time comparatively.



Overtime hours for medicine increased by 1 25%

in Ontario in the first full year of the pandemic.



Overtime is calculated as a percentage of total worked hours and excludes purchased service hours and medical staff. Sick time is calculated as a percentage of full time staff total worked hours and excludes medical staff.

