

Adapting during a Global Pandemic: Capturing Remdesivir in the National Healthcare Safety Network (NHSN) Antimicrobial Use Option

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Background

The Centers for Disease Control and Prevention’s (CDC’s) National Healthcare Safety Network (NHSN) launched the Antimicrobial Use (AU) Option in 2011.

NHSN AU Option enables AU reporting and analysis in support of benchmarking and stewardship activities.

Typically, NHSN makes decisions annually about which antimicrobials to add or remove from the Option. However, more timely decisions can be made when AU data are needed on new or high-priority antimicrobials.

Methods

NHSN closely monitored new treatments for COVID-19, assessing opportunities to track use of key therapeutics.

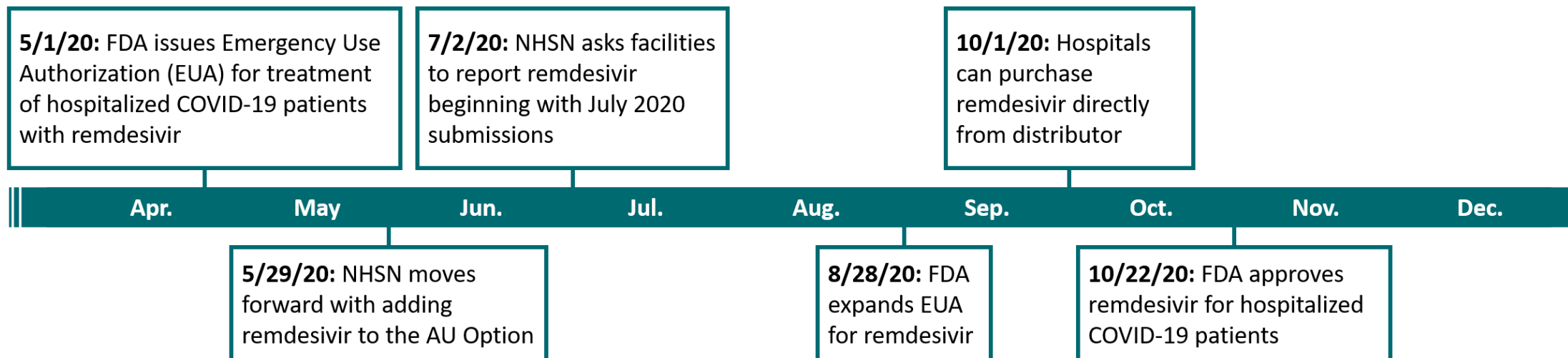
NHSN implemented remdesivir reporting to the AU Option during an application update on 7/2/20.

The update required facilities to report remdesivir in AU files beginning with July 2020 data submissions and enabled optional submission of remdesivir for summary months January – June 2020.

NHSN tracked the number of facilities reporting use and their use at the facility and patient care location levels.

NHSN reviewed submissions for data quality concerns and conducted outreach as appropriate.

Results



48% (n=794) facilities optionally reported remdesivir use for June 2020. This represents 48% of all facilities submitting data for June 2020.

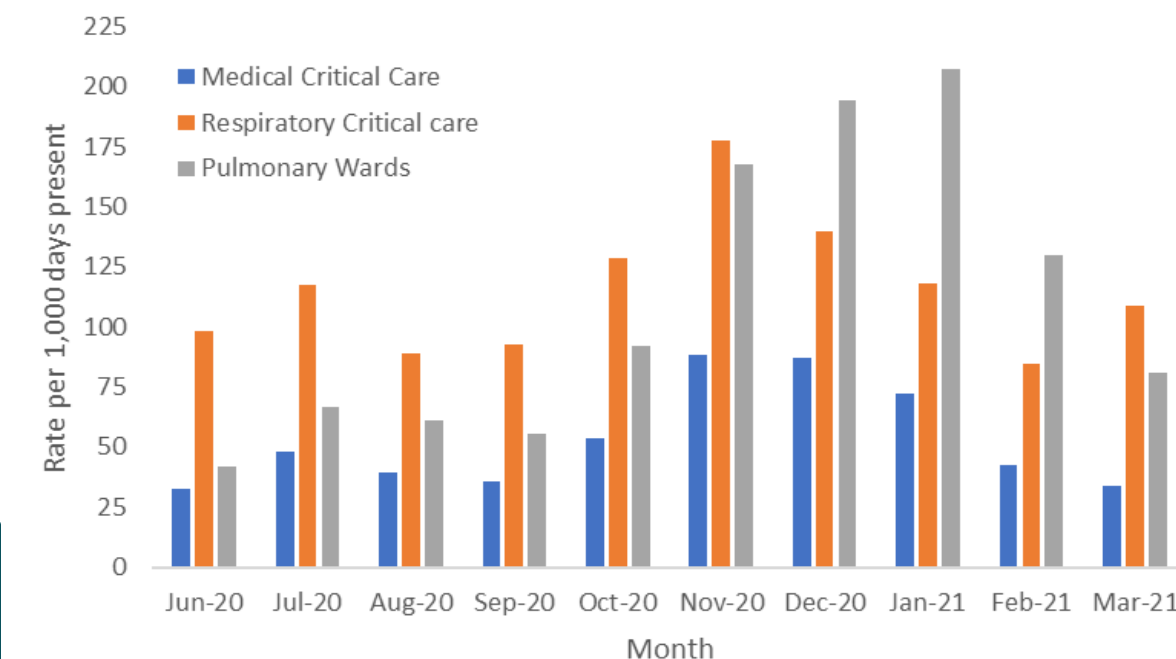
1561 facilities reported >0 remdesivir use at least once, at the facility-wide inpatient (FacWideIn) level during July 2020 – May 2021. This represents 86% of all facilities submitting FacWideIn data at least once during this time period.

21 per 1,000 days present
At the FacWideIn level, the pooled mean rate of remdesivir use was 21 antimicrobial days per 1,000 days present from July 2020 through May 2021.

122.7 per 1,000 days present
During June 2020 – May 2021, rates of remdesivir use were highest in Respiratory Critical Care units (pooled mean 122.7 per 1,000 days present) followed by Pulmonary wards (pooled mean 119.8 per 1,000 days present).

During analysis, NHSN identified **45** facilities with data quality concerns related to report of remdesivir use. Subsequent outreach resulted in increased understanding of reporting practices, updates to reporting plans to facilitate accurate data capture, and increased communication between facilities and vendors.

Pooled mean rate of remdesivir in select locations June 2020 through March 2021



Conclusions

The rapid mid-year addition of remdesivir and prompt uptake in reporting by hospitals participating in NHSN’s AU surveillance highlight the AU Option’s flexibility, timeliness, and acceptability as a surveillance system. NHSN continues to monitor remdesivir use, explore opportunities for additional analysis and review these data for potential data quality concerns.

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