



Correction to: Repeat SARS-CoV-2 testing models for residential college populations

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Correction to: Health Care Manag Sci (2020)

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The original version of this article unfortunately contained a mistake in the equation and reference. Thus, this erratum is presented to correct the errors.

In Chang et al. [1], eq. (12) was written as

$$\Pr\{T > a\} = \int_{t=a}^{\infty} \frac{\sigma(t)}{\tau} \prod_{k=1}^{\lfloor \frac{t}{\tau} \rfloor} (1 - \sigma(t - k\tau)) dt \text{ for } a > 0.$$

This equation should be stated as

$$\Pr\{T > a\} = 1 - \int_{t=0}^a \frac{\sigma(t)}{\tau} \prod_{k=1}^{\lfloor \frac{t}{\tau} \rfloor} (1 - \sigma(t - k\tau)) dt \text{ for } a > 0.$$

These expressions are not identical because the density being integrated is improper — the integrand is the probability

density for the time to isolation, but it is possible that an infection is never detected (that is, it is possible that T is infinite).

All numerical calculations in the paper are correct, and the associated app (<https://jtwchang.shinyapps.io/testing/>) does compute $\Pr\{T > a\}$ properly.

Reference

1. Chang JT, Crawford FW, Kaplan EH (2020) Repeat SARS-CoV-2 testing models for residential college populations. Health Care Manag Sci. <https://doi.org/10.1007/s10729-020-09526-0>

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