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**A NOTE ON TWO PERFORMANCE METRICS FOR PUBLIC
HEALTH SURVEILLANCE SCHEMES**

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Summary

Using a simple Markov chain representation, we evaluate and compare two metrics (recurrence interval and average time between signal events) that are often used in the evaluation of the statistical performance of health-related surveillance methods. We use several hypothetical scenarios to develop a further understanding of the inherent differences between these two metrics. Our results support recent literature findings that recommend the use of the average time between signal events rather than the recurrence interval in the evaluation of the performance of health-related surveillance schemes that do not reset after signaling.

Keywords: Average time between signal events (ATBSE), control chart, health-related monitoring; performance metrics, recurrence interval, statistical process control.

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