

## **Symptom–Disease Pair Analysis of Diagnostic Error (SPADE): a conceptual framework and methodological approach for unearthing misdiagnosis-related harms using big data.**

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Liberman AL, Newman-Toker DE. Symptom-Disease Pair Analysis of Diagnostic Error (SPADE): a conceptual framework and methodological approach for unearthing misdiagnosis-related harms using big data. *BMJ Qual Saf.* 2018;27(7):557-566. doi:10.1136/bmjqs-2017-007032.

<https://psnet.ahrq.gov/issue/symptom-disease-pair-analysis-diagnostic-error-spade-conceptual-framework-and-methodological>

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Patient safety measurement remains [challenging](#). This article describes a framework to address gaps in measuring [diagnostic error](#). The authors propose utilizing [big data](#) to develop diagnostic performance dashboards and benchmarking tools that support proactive learning and [improvement](#) strategies.