

Working collaboratively may help reduce medical errors

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Medical students who worked in pairs were more accurate in diagnosing simulated patient cases compared to students who worked alone, according to a study in the January 20 issue of *JAMA*.

Diagnostic errors contribute substantially to preventable [medical error](#). Cognitive error is among the leading causes of [diagnostic errors](#) and mostly results from faulty data synthesis, according to background information in the article.

Wolf E. Hautz, M.D., M.M.E., of the Charite Campus Mitte and Campus Virchow Klinikum, Berlin, Germany, and colleagues investigated the effect of working in pairs as opposed to alone on diagnostic performance among fourth-year [medical students](#). Participants were randomly assigned to work individually or in pairs. Their main task was to evaluate six simulated cases of difficult breathing on a computer. Each case started with a video presentation of a prototypical patient. Thereafter, participants could select, in any order, from 30 [diagnostic tests](#) and as many as desired, but were instructed to be as fast and accurate as possible. Results were presented as real-world clinical information (heart sounds or x-ray images). To complete a case, participants had to select 1 of 20 diagnoses and indicate their confidence in the answer.

Of 88 students recruited, 28 worked individually and 60 in pairs. Pairs of [students](#) were more accurate than individuals in selecting a correct diagnosis (68 percent vs 50 percent) despite having comparable

knowledge about the topic and selecting an equal number of diagnostic tests. Pairs needed longer time than individuals to reach a diagnosis, but the tests they selected would have taken less time in a real clinical setting. Pairs were more confident with their selected diagnoses than individuals.

"Similar to other studies, collaboration may have helped correct errors, fill knowledge gaps, and counteract reasoning flaws," the authors write.

More information: [DOI: 10.1001/jama.2014.15770](https://doi.org/10.1001/jama.2014.15770)

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