

Machine translations similar to professionals for Spanish, Portuguese discharge instructions

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For Spanish and Portuguese, machine translation platforms have comparable performance to professional translations for discharge instructions for pediatric conditions, but considerable shortcomings were seen for Haitian Creole, according to a study [published](#) online June 11 in *Pediatrics*.

Ryan C.L. Brewster, M.D., from the Boston Combined Residency Program in Pediatrics at Boston Children's Hospital and Boston Medical Center, and colleagues translated 20 standardized discharge instructions for pediatric conditions into Spanish, Brazilian Portuguese, and Haitian Creole by professional translation services, Google Translate, and ChatGPT-4.0 and assessed adequacy (preserved information), fluency (grammatical correctness), meaning (preserved connotation), and severity (clinical harm).

The researchers found that for Spanish and Portuguese, Google Translate and ChatGPT demonstrated similar domain-level ratings to professional translations. For Haitian Creole, professional translations demonstrated significantly greater adequacy, [fluency](#) meaning, and severity scores compared with both Google Translate and ChatGPT.

More potentially clinically significant errors (severity score ≤ 3) were seen for ChatGPT and Google Translate than professional translations (33.3 and 23.3 percent, respectively, versus 8.3 percent) for Haitian Creole. Among the translation sources, professional Haitian Creole and Portuguese, but not Spanish, translations were more frequently preferred (48.3 and 43.3 percent, respectively, versus 15 percent).

"Our study provides key insights into the promise and limitations of using [machine translation](#) for clinical documents provided to families who speak languages other than English," the authors write.

More information: Ryan C.L. Brewster et al, Performance of ChatGPT and Google Translate for Pediatric Discharge Instruction Translation, *Pediatrics* (2024). [DOI: 10.1542/peds.2023-065573](https://doi.org/10.1542/peds.2023-065573)

Alyssa Coffin et al, Creating Culturally Adapted Multilingual Materials for Research, *Pediatrics* (2024). [DOI: 10.1542/peds.2023-063988](https://doi.org/10.1542/peds.2023-063988)

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