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UCSF Department of
Neurology

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To the AI/ Machine Learning Demonstration Pilot Project 2025 Selection Committee:

I am writing to express my enthusiastic support for the HEAD-GAIN project, which aims to expedite and improve care for headache patients referred to the UCSF Neurology and beyond. The current referral-based system often leads to delayed care for those with potentially serious secondary headaches, while simultaneously creating lengthy wait times for all patients. HEAD-GAIN offers an innovative solution to this clinical challenge.

The project's approach—using an expert-curated pre-visit patient questionnaire analyzed by large language model technology—represents a thoughtful application of artificial intelligence in healthcare that can significantly enhance clinical decision-making for the non-specialist. By identifying patients at risk for secondary headaches who require expedited evaluation early in the referral process, and simultaneously providing evidence-based treatment recommendations for those with primary headaches, HEAD-GAIN has the potential to:

- Reduce wait times for patients with secondary headache
- Improve overall patient outcomes through earlier intervention
- Decrease the burden on specialist services through more efficient triage
- Standardize care according to best practices and clinical guidelines

The validation of such a tool would represent a significant advancement in care for patients with headache and could potentially be applied to other neurological and non-neurological conditions where early differentiation of urgent and less urgent diagnoses can lead to widespread benefits. Once validated, this tool could be utilized more widely by first-line care providers such as primary care and emergency care clinicians.

I believe this project has tremendous potential to improve patient care, optimize clinical workflows, and serve as a model for similar approaches in other medical specialties. As the General Neurology Division Chief, I am motivated to ensure the success of this clinical tool and have already engaged with primary care partners and neurologists in other divisions working on similar projects. I fully support the HEAD-GAIN project and look forward to the positive impact it will have on headache management and patient outcomes.

Sincerely,

A handwritten signature in black ink, appearing to read 'Maggie Waung'.

Maggie Waung MD, PhD
General Neurology Division Chief
Jan and Maria Manetti Shrem Endowed Professorship