

# UVM ScholarWorks

## Investigating Disparities in EHR Workload: Increased Burden of Patient Advice Request Messages on Female Physicians

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## Introduction

Epic MyChart messaging or Electronic Health Record (EHR) patient portal messaging are **efficient** means of facilitating **patient-clinician communications**.

Female primary care clinicians:

- Received **significantly more** patient advice messages and **spent more time** in their In Basket than their non-female counterpart<sup>2</sup>
  - Response times and staff handling **across both groups were equivalent<sup>2</sup>** (despite these findings)
- Spend more time with patients, and as a result, spend more time documenting in the EHR<sup>3</sup>
- Are more susceptible to clinician burnout

## Objective

Investigate relationships explaining why female primary care clinicians receive a disproportionately higher amount of patient messages.

## Results

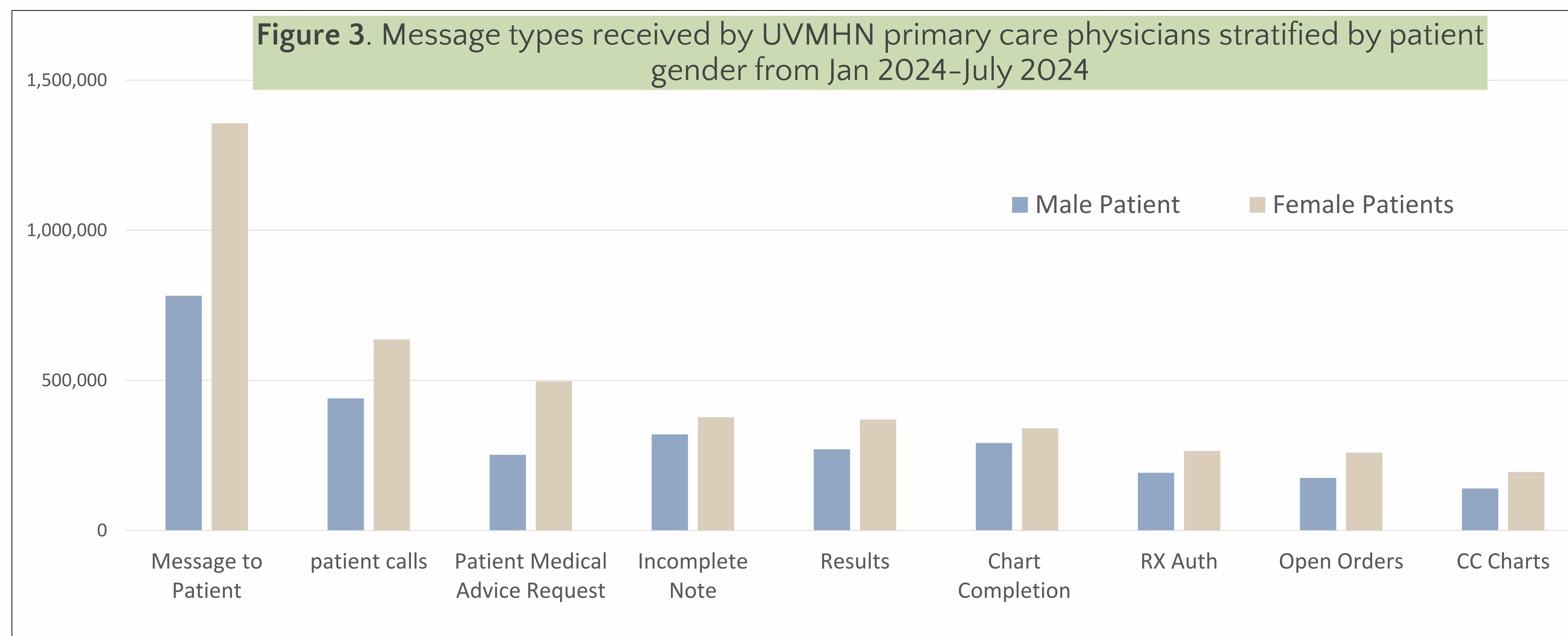


Figure 3. Message types received by UVMHN primary care physicians stratified by patient gender from Jan 2024-July 2024

Table 1. Gender concordance between Primary Care Clinician and patient

	Male clinician	Female clinician
Male patient	48%	26%
Female patient	26%	53%
Undisclosed patient	26%	21%

Table 2. Illness severity risk-adjusted panels, by clinician gender

	Female Clinician Average	Male Clinician Average	P-value
Observed/Expected Panel (O/E)	0.9	1	0.2
Serious Illness	9.03	10.1	0.16
Longitudinal Needs	45.8	52.1	0.12
Complex Polychronic	20.94	28.5	**0.003

## Methods

Epic EHR data obtained from 255 primary care clinicians (148 female and 78 male) in UVM Health Network

Epic Slicer Dicer data was then analyzed in excel. Averages were calculated, and a T-test was performed to determine if significant differences existed between male and female clinician groups :

- Total patient numbers and percentages
- In-basket patient messages
- De-identified risk-adjusted panels

## Discussion

Female clinicians compared to male clinicians:

- Received **significantly more patient advice messages**
- Manage a patient population with a **more female patients**. Female patients in turn **send twice as many messages** as male patients, increasing messaging workload for female physicians
- Had no difference in **risk-adjusted panel severity**
- Spend **more time** in their in-basket

## Next Steps

- Explore higher engagement of female patients with female clinicians
  - Patient preference?
- Develop interventions to balance workload among clinicians
  - Reducing physician burnout and improving patient care
- Patients are requesting more digital/non face-to-face health care and female clinicians appear to need more digital health time to compete this work

Acknowledgements: Drs. Yao Li, Sean Maloney, Rachel K McEntee

## References

- Garvey, G. (2023, December 26). More physician inbox messages, higher patient satisfaction? *American Medical Association*.
- Scholes, J., Karpowicz, K., Jacobs, A., McEntee, R., & Sandoval, M. (n.d.). Female clinicians face higher workload burden associated with increased electronic health record patient advice request messages. *Larner College of Medicine at University of Vermont; University of Vermont Health Network*.
- Southwick, R. (2022, January 26). Female doctors spend more time with patients, and it could cost them. *Chief Healthcare Executive*.

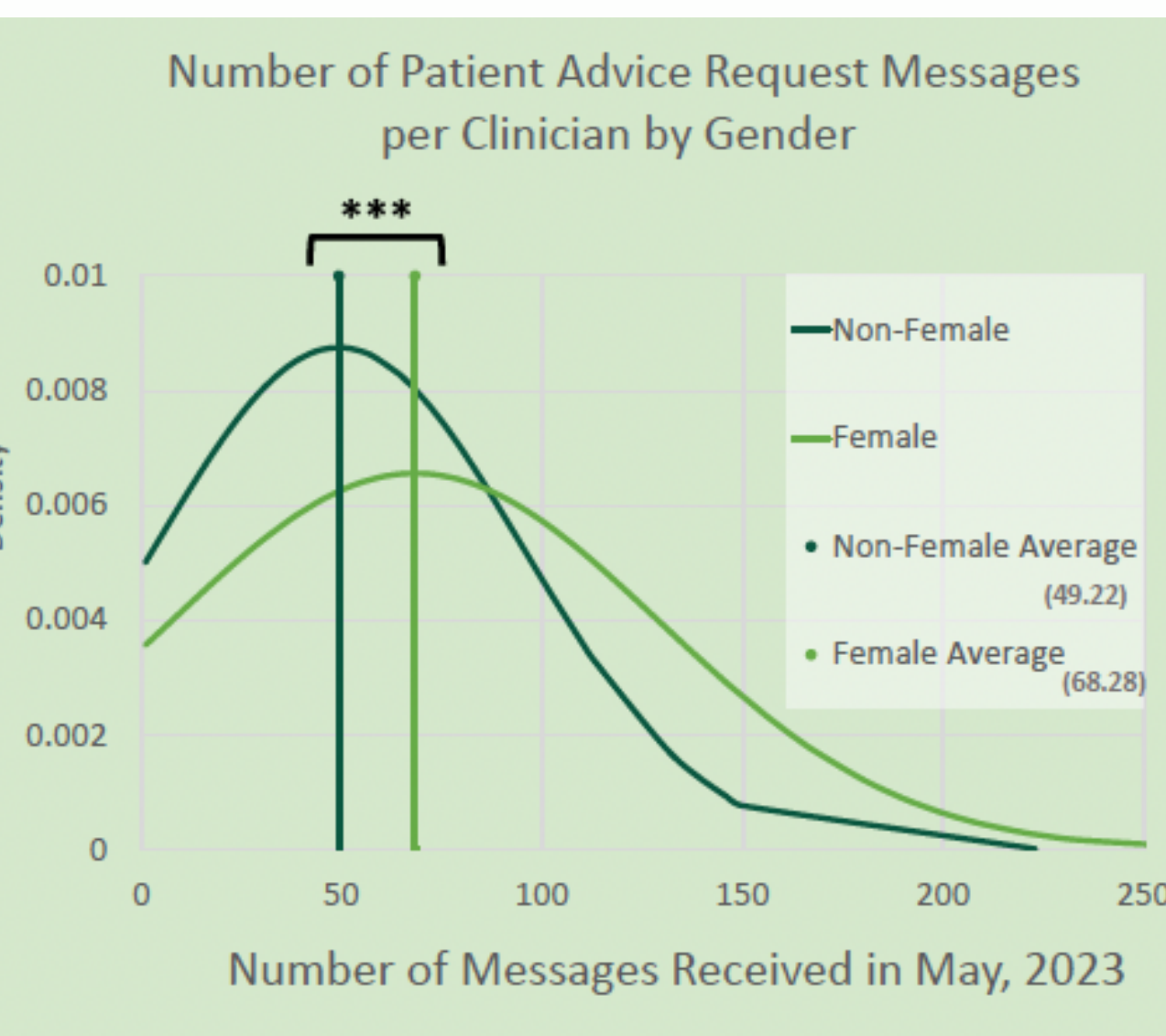


Figure 1. Female clinicians received more medical advice request messages than non-female colleagues<sup>2</sup> (p=0.005)

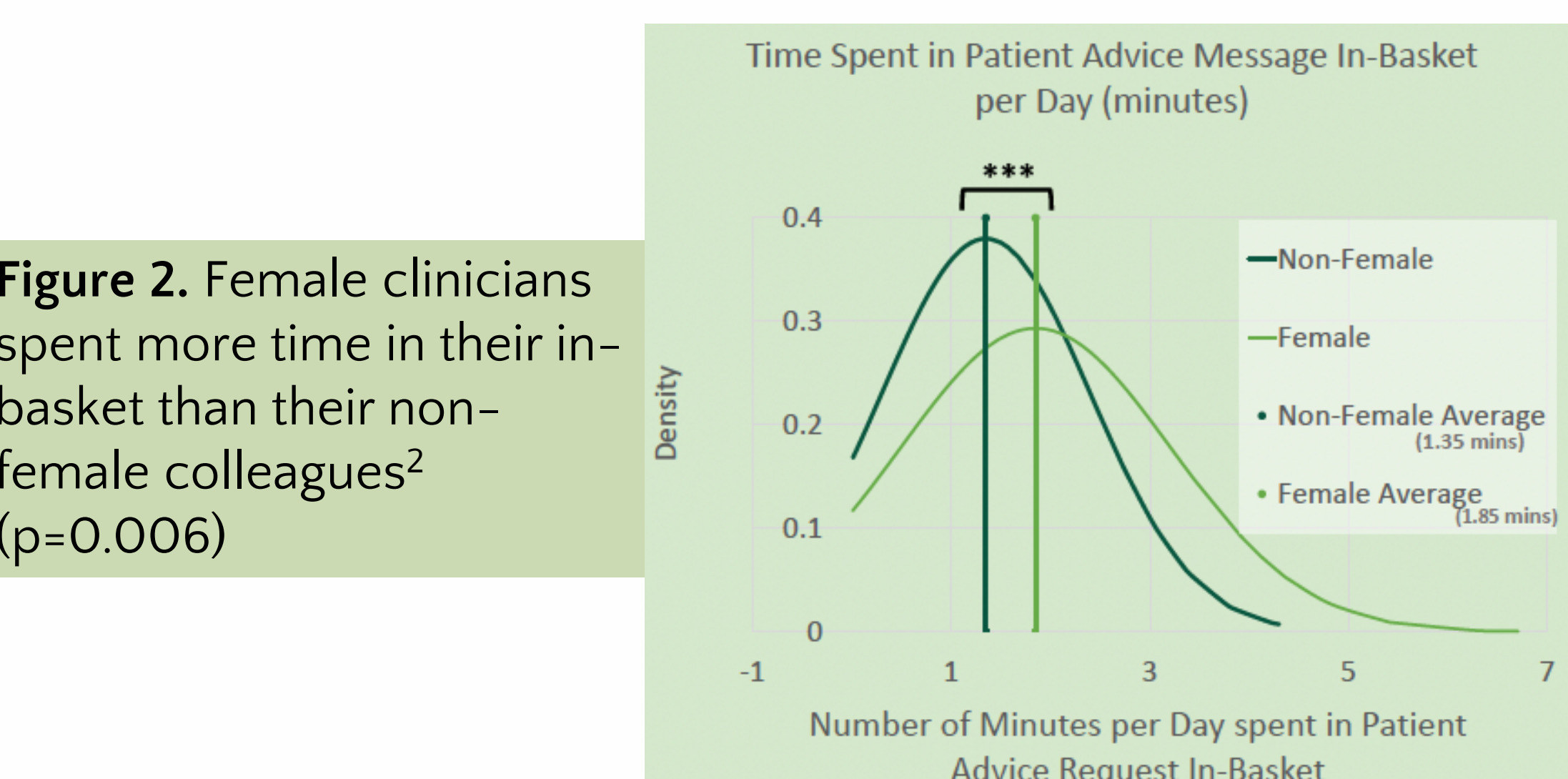


Figure 2. Female clinicians spent more time in their in-basket than their non-female colleagues<sup>2</sup> (p=0.006)