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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 counterpart²
 - Response times and staff handling **across both groups were equivalent²** (despite these findings)
- Spend more time with patients, and as a result. spend more time documenting in the EHR³
- Are more susceptible to clinician burnout

Objective

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

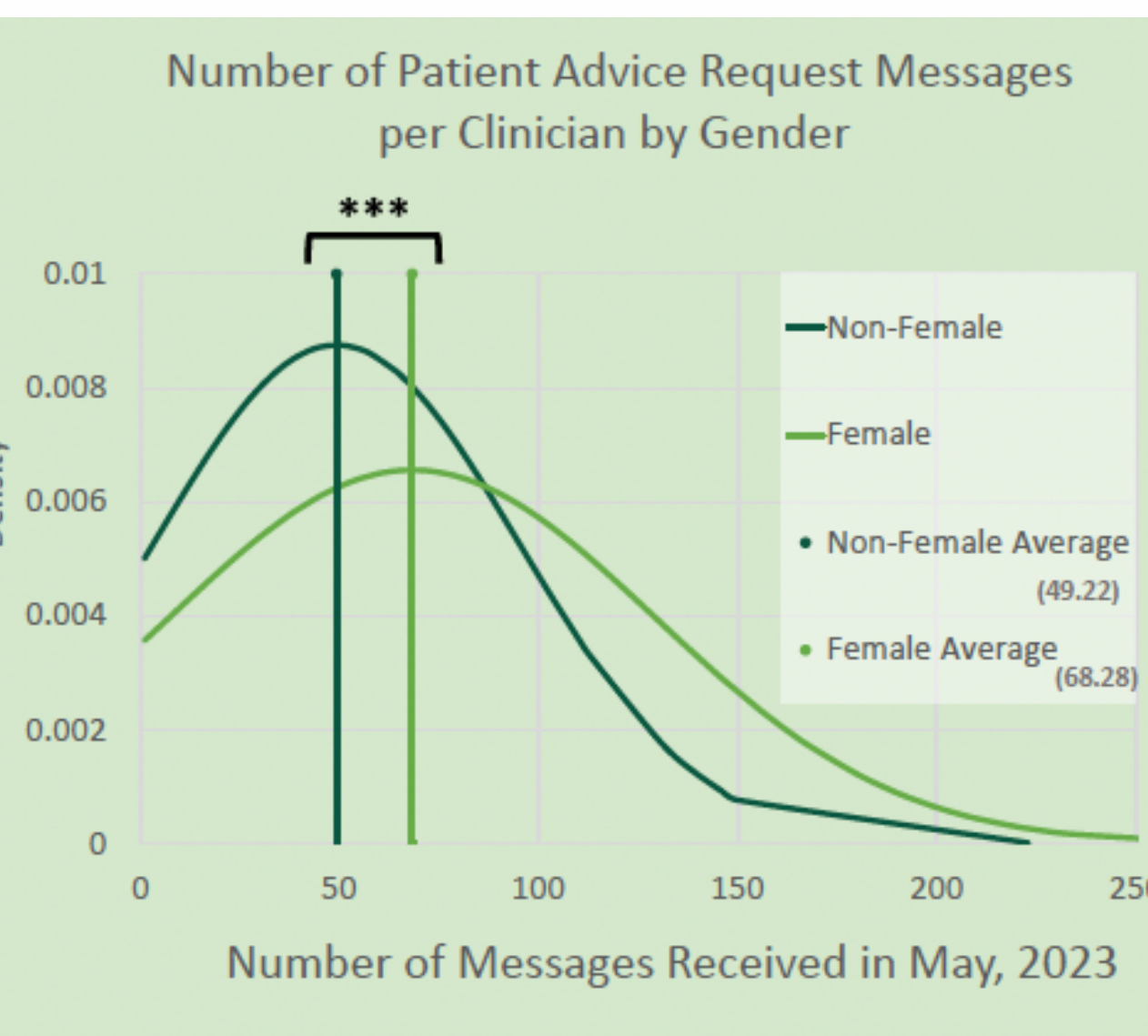
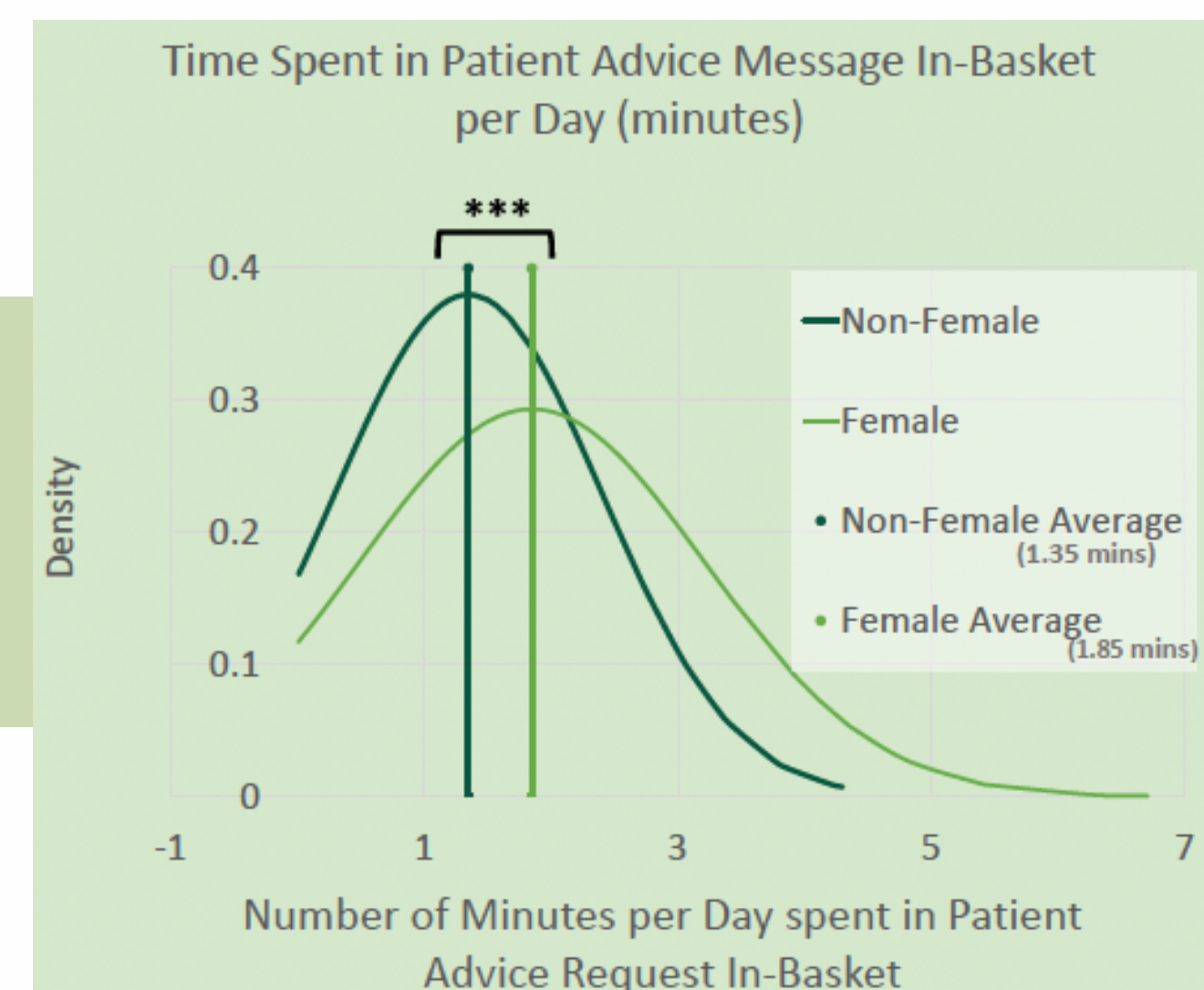


Figure 1. Female clinicians received more medical advice request messages than non-female colleagues² (p=0.005)

Figure 2. Female clinicians spent more time in their in-basket than their non-female colleagues² (p=0.006)



Results

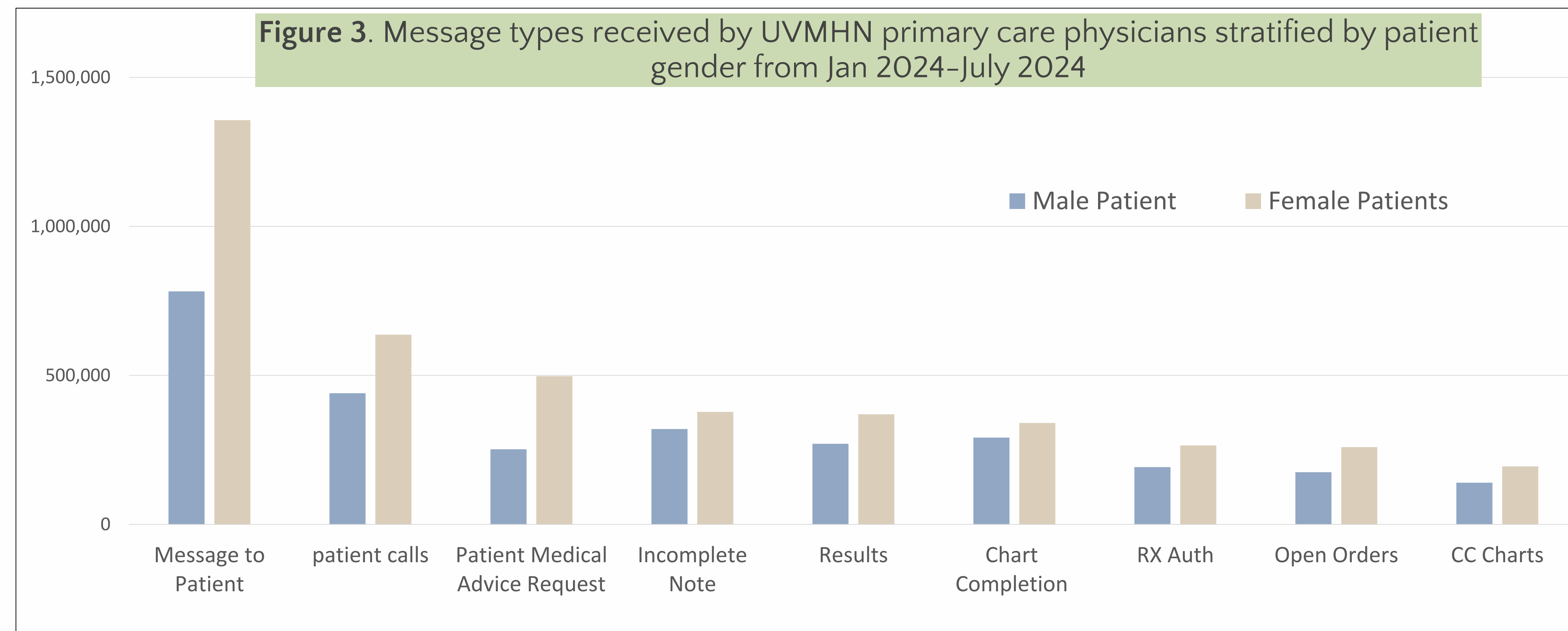


Table 1. Gender concordance between Primary Care Clinician and patient

	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

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References

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