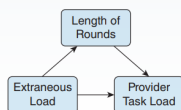


## What Features of ICU Rounds Correlate With High Provider Cognitive Load?

### STUDY DESIGN

- **Observational, multisite study** involving 76 multidisciplinary providers during 32 ICU rounds at two academic medical centers
- Utilized the **provider task load (PTL) survey** to measure providers' perceived cognitive load after rounds
- Rounding variables
  - Duration of rounds
  - Patient census
  - Newly admitted patients
  - Patients requiring ICU vs stepdown level care
  - Patients requiring pressors/ventilation



### RESULTS

#### RELATIONSHIPS BETWEEN ROUNDING FACTORS AND PROVIDER TASK LOAD SCORE

Predictor	Estimate	95% CI	P Value
Provider age	1.10	- 1.23 to 3.43	.35
Female sex	8.02	- 17.1 to 33.1	.53
UCH MICU location	6.61	- 17.2 to 30.4	.58
<b>Extraneous load events per hour</b>	<b>2.40</b>	<b>0.76 to 4.04</b>	<b>.004</b>
<b>New patients</b>	<b>5.23</b>	<b>2.02 to 8.43</b>	<b>.002</b>
<b>Patients on MV or VP</b>	<b>3.35</b>	<b>1.34 to 5.35</b>	<b>.001</b>

MICU = medical ICU; MV = mechanical ventilation; UCH = University of Colorado Hospital; VP = vasopressor.



One extra extraneous load event increased PTL score (2.40/event; 20.5 events/h average)



One new patient increased PTL score (5.23/patient; 12.5 patient avg census)



One added higher acuity patient increased PTL score (3.35/patient)

**Increased extraneous load, new patients, and patient acuity were associated with higher cognitive load during ICU rounds.**