

# On-Call: Trends in Medical Needs Among University Students Accessing an After-hours Triage Service

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## Introduction

Timely medical advice supports the health and safety of college students. Institutions of Higher Education (IHE) must consider options for providing such advice during non-business hours. Access to after-hours care has been found to improve patient outcomes and reduce the use of Emergency Departments (ED). *This poster describes the one-year experience of a large public university's Student Health and Wellness (SHW) center in managing after-hours calls for medical concerns. Calls are initially triaged by a contracted nursing service and escalated to on-call SHW licensed independent providers when indicated.*

## Methodology

- A summary of individual encounters with the after-hours nurse triage service for a medical issue are forwarded electronically to SHW and reviewed each business day by SHW medical staff.
- Clinical information is transcribed into a template in the SHW electronic medical record (EMR). The template includes categories for chief complaint(s), time of encounter, phone triage advice, and Care Manager follow-up.
- Template data was linked to student administrative data (race/ethnicity, academic status) and deidentified for analysis.

## Results

Chief Complaint*	Percentage of Calls
Genito-urinary/Gynecologic	20.1%
Head, ears, eyes, nose, throat	18.3%
Gastrointestinal	12.8%
Skin	11.4%
Musculoskeletal/Accident/Injury	11.3%
Respiratory	9.6%
Neurologic	6.9%
Other	3.5%
General Illness	3.0%
Cardiac	2.4%
Dental	0.5%
Assault	0.3%

\*A caller may have more than one chief complaint. Each complaint is counted by category.

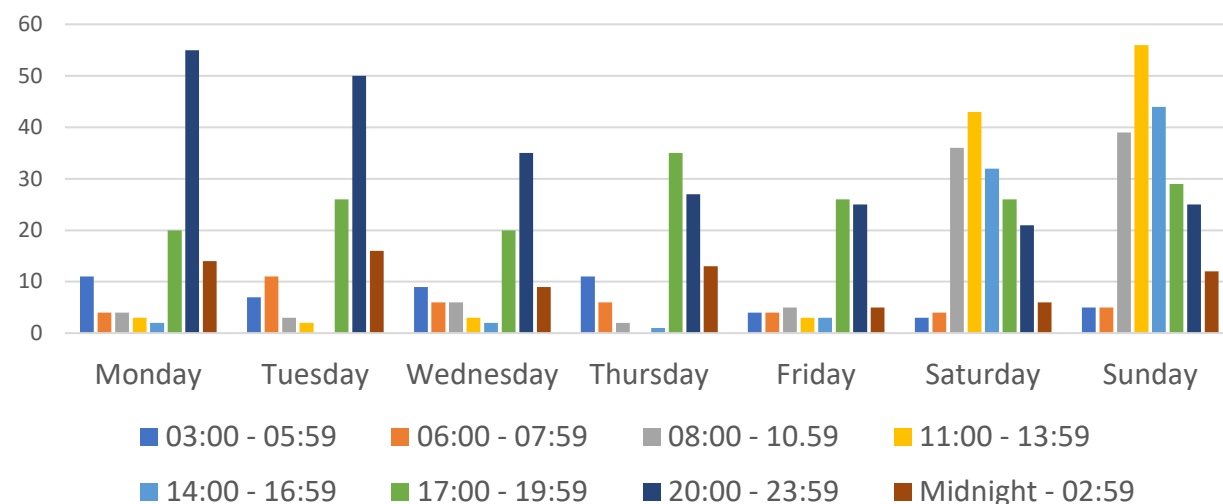
## Discussion

- Between Aug 2018 – Dec 2019, a total of **876 after-hours calls** were made by **788 distinct students** or 3% of the approximately 25,000 students enrolled per academic year at the University.
  - Significantly more female (67% vs. 57%) and undergraduates (76% vs. 68%) used the after-hours nurse triage service when compared to the overall student body. There was no difference in utilization between race/ethnicities.
- The majority of weekend calls occurred between 8am and 5pm, while weekday after-hours calls peaked between 8pm and 12am.
  - Weekday business hour calls occurred during holiday breaks when SHW was closed.
  - Longer weekday business hours to 7 or 8pm would not have met the peak need for after-hours calls.
- Only 25% of calls resulted in a recommendation for Emergency Department Care. All other calls resulted in a less intensive, and less costly, care recommendation.

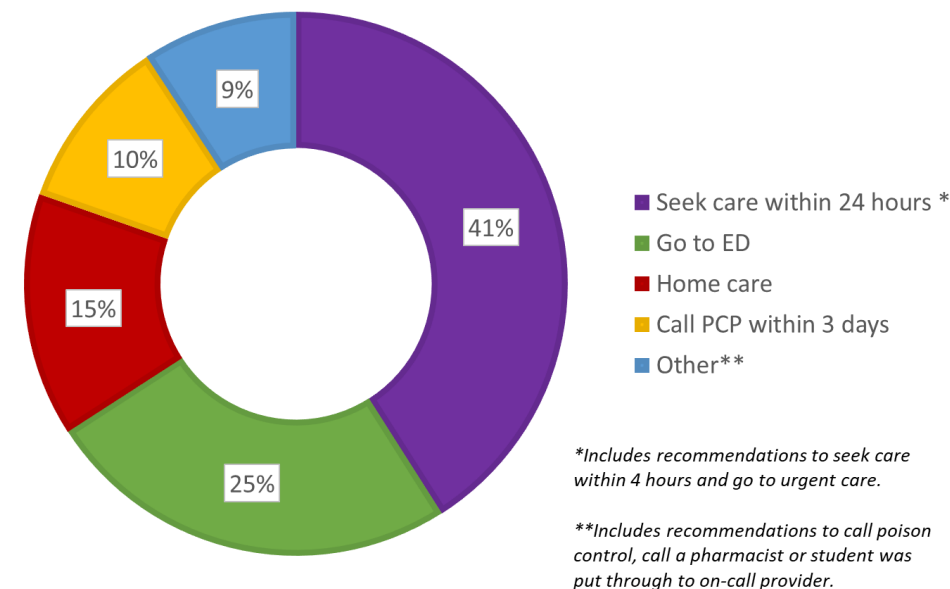
## Conclusion and Future Directions

- By providing access to medical advice during non-business hours, IHE's ensure that students' healthcare needs are matched to the appropriate healthcare setting and level of intervention.
- Ongoing communication and collaboration between IHE medical staff and contracted after-hours nurse triage service are essential to meet the wide variety of health care needs that arise during non-business hours.
- Consistent charting of after-hours calls within a template allows for ongoing care management of the individual student as well as review of aggregate utilization data.
- Limitations: The after-hours nurse triage service does not have access to the SHW EMR; they depend strictly on standard triage protocols.
- Future directions:
  - Identify the number of students who access the ED without first seeking advice from the after-hours nurse triage service. Optimize student awareness and utilization of this service.
  - Study after-hours calls for mental health concerns.

AFTER-HOURS CALLS: DAYS AND TIMES



AFTER-HOURS CALLS: RECOMMENDATIONS



\*Includes recommendations to seek care within 4 hours and go to urgent care.

\*\*Includes recommendations to call poison control, call a pharmacist or student was put through to on-call provider.