



# Characteristics and presentation of patients with suspected cancer presenting to an oncologic emergency department.

Adriana H Wechsler, Patricia Brock, Aiham Qdaisat, Marcelo Sandoval, Jazmin Menendez, Faith M. Dupler, Monica K Wattana

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## Background

Emergency Departments (ED) are often frequented by patients with symptoms linked to a suspected but unconfirmed cancer, often discovered through subsequent medical encounters. ED care is often more expensive, fraught with care fragmentation and associated with delay in diagnosis (1,2,3). In this paper, we explored the ED presentation and disposition of patients presenting to a dedicated cancer hospital with a suspicion of cancer before a definitive diagnosis to better characterize their needs and possible opportunities for care in the outpatient setting.

## Methods

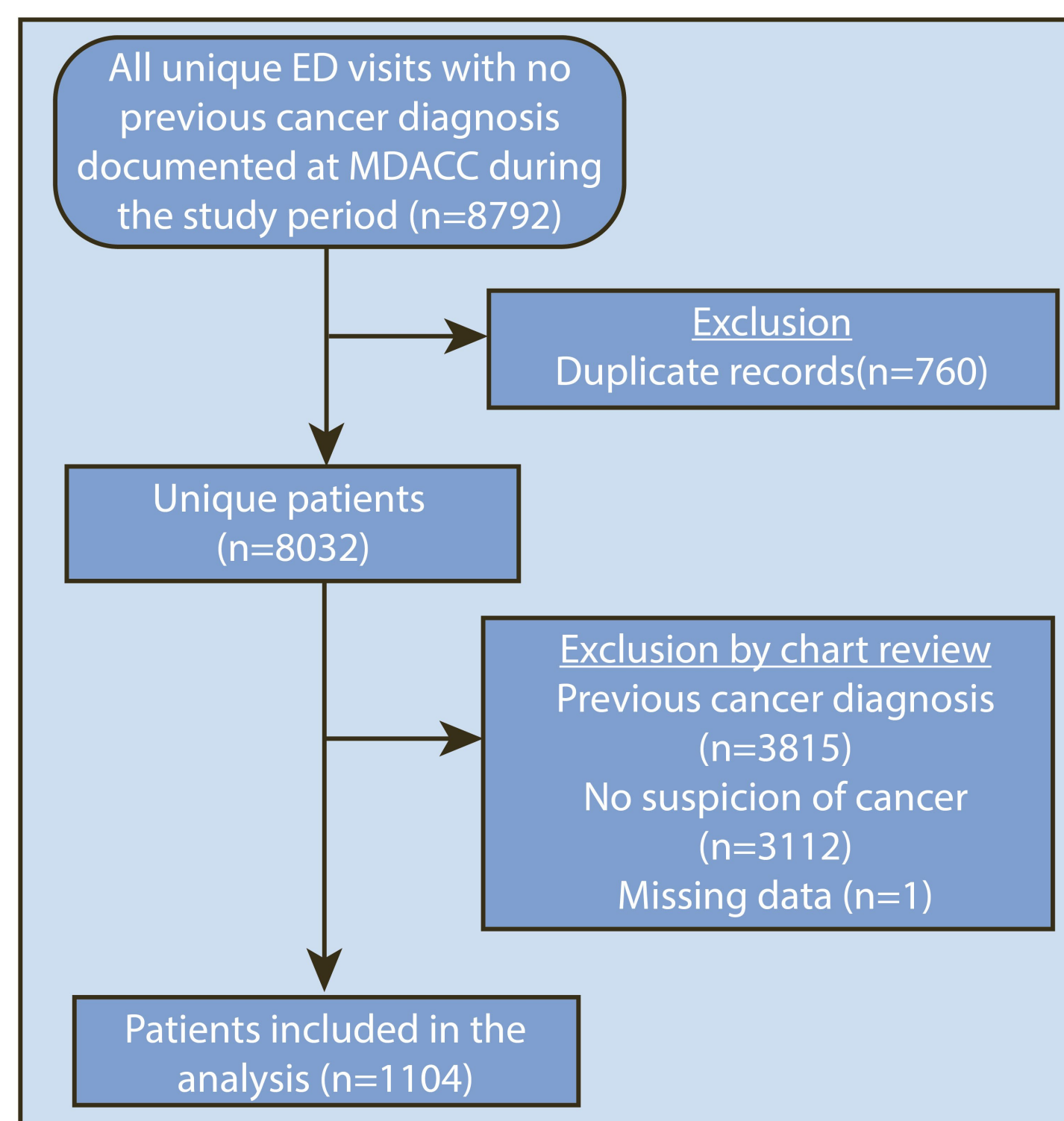
All ED visits between January 1, 2018, and December 31, 2021, by individuals  $\geq 18$  years of age with no prior cancer diagnosis were identified from our institutional database. We conducted a chart review to confirm the absence of any previous cancer to confirm follow-up care within our institution. Data on demographics, ED presentations, and clinical conditions were collected. Descriptive statistics were used to examine and compare the presentation and outcomes of the final cohort

## Results:

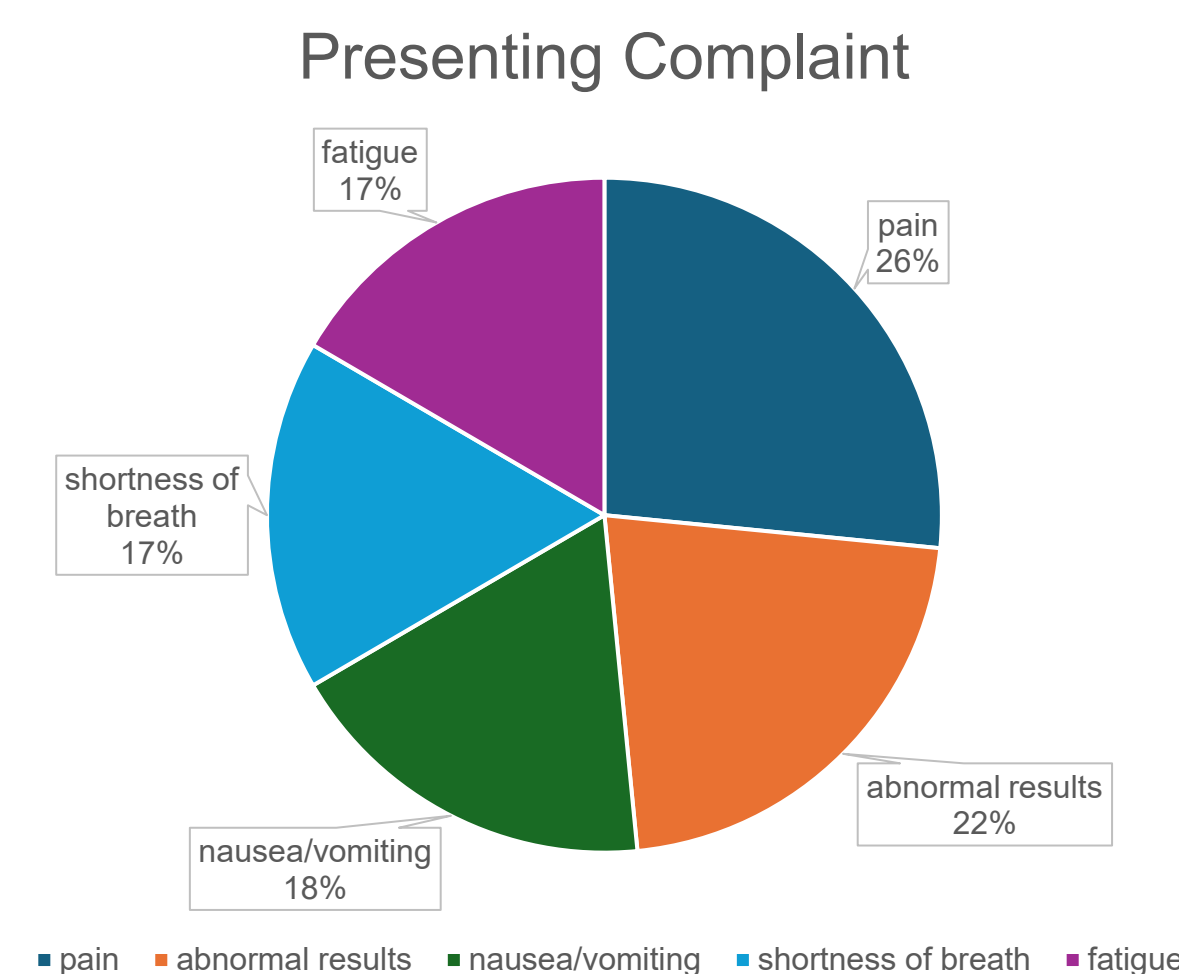
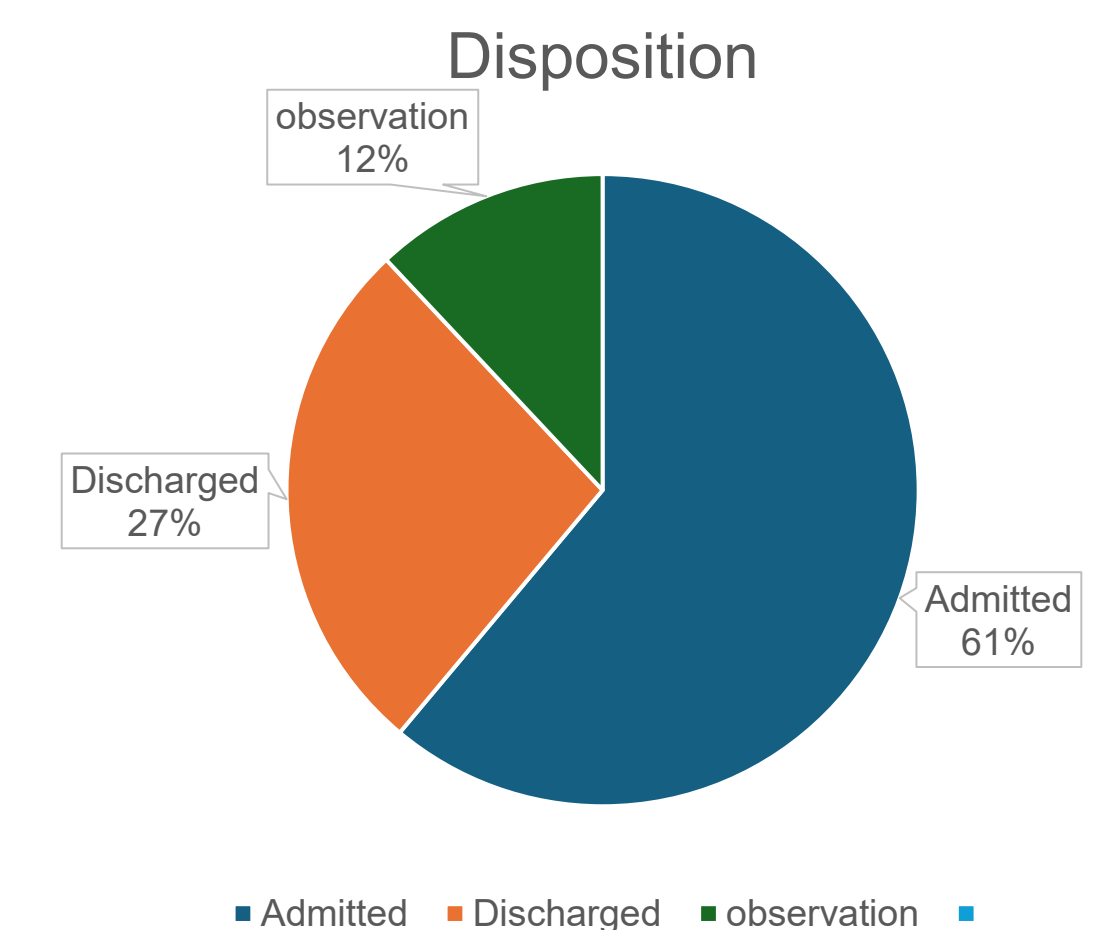
A total of 855 met the final eligibility criteria. The cohort was almost half female and half male, with the majority being White race (57.5%) and not Hispanic or Latino ethnic group (72.5%). The median age was 57 years, with the interquartile range ranging from 45 to 67 years. A total of 97.7% of the patients presented with either Emergency Severity Index levels 2 or 3 (i.e., emergent or urgent acuity levels). The most common complaint at presentation was pain, with 22.1% reporting some form of pain. The other top presenting complaints were abnormal lab results (18.2%), nausea/vomiting (15.1%), shortness of breath (14.0%), and fatigue (13.8). Of the 855 patients, 60.6% were admitted to the hospital, 26.7% were discharged home, and 11.9% were placed under observation.

## Conclusions:

The majority of patients visiting an oncologic emergency department (ED) with a suspected but unconfirmed cancer diagnosis require hospital admission. Additionally, nearly a quarter of these patients present with pain-related symptoms. Further research is needed to identify the factors and barriers that lead patients with suspected cancer to seek care at oncologic EDs before receiving a confirmed diagnosis. Understanding these factors could help reduce ED utilization among this patient group.



**Figure 1**  
**Flow Diagram for New Suspicion of Cancer Patients Presenting to the Emergency Department**



## References

- 1) Thompson CA, Sheridan P, Metwally E, Peacock Hinton S, Mullins MA, Dillon EC, Thompson M, Pettit N, Kurian AW, Pruitt SL, Lyrtzopoulos G. Emergency department involvement in the diagnosis of cancer among older adults: a SEER-Medicare study. *JNCI Cancer Spectr.* 2024 Apr 30;8(3):pkac039. doi: 10.1093/jncics/pkae039. PMID:38796687; PMCID: PMC11193434.
- 2) Alishahi Tabriz A, Turner K, Hong Y, Gheytasvand S, Powers BD, Elston Lafata J. Trends and Characteristics of Potentially Preventable Emergency Department Visits Among Patients With Cancer in the US. *JAMA Netw Open.* 2023;6(1):e2250423. doi:10.1001/jamanetworkopen.2022.50423
- 3) Hester, C.A., Karbhari, N., Rich, N.E., Augustine, M., Mansour, J.C., Polanco, P.M., Porembka, M.R., Wang, S.C., Zeh, H.J., III, Singal, A.G. and Yopp, A.C. (2019), Effect of fragmentation of cancer care on treatment use and survival in hepatocellular carcinoma. *Cancer*, 125: 3428-3436. <https://doi.org/10.1002/cncr.32336>



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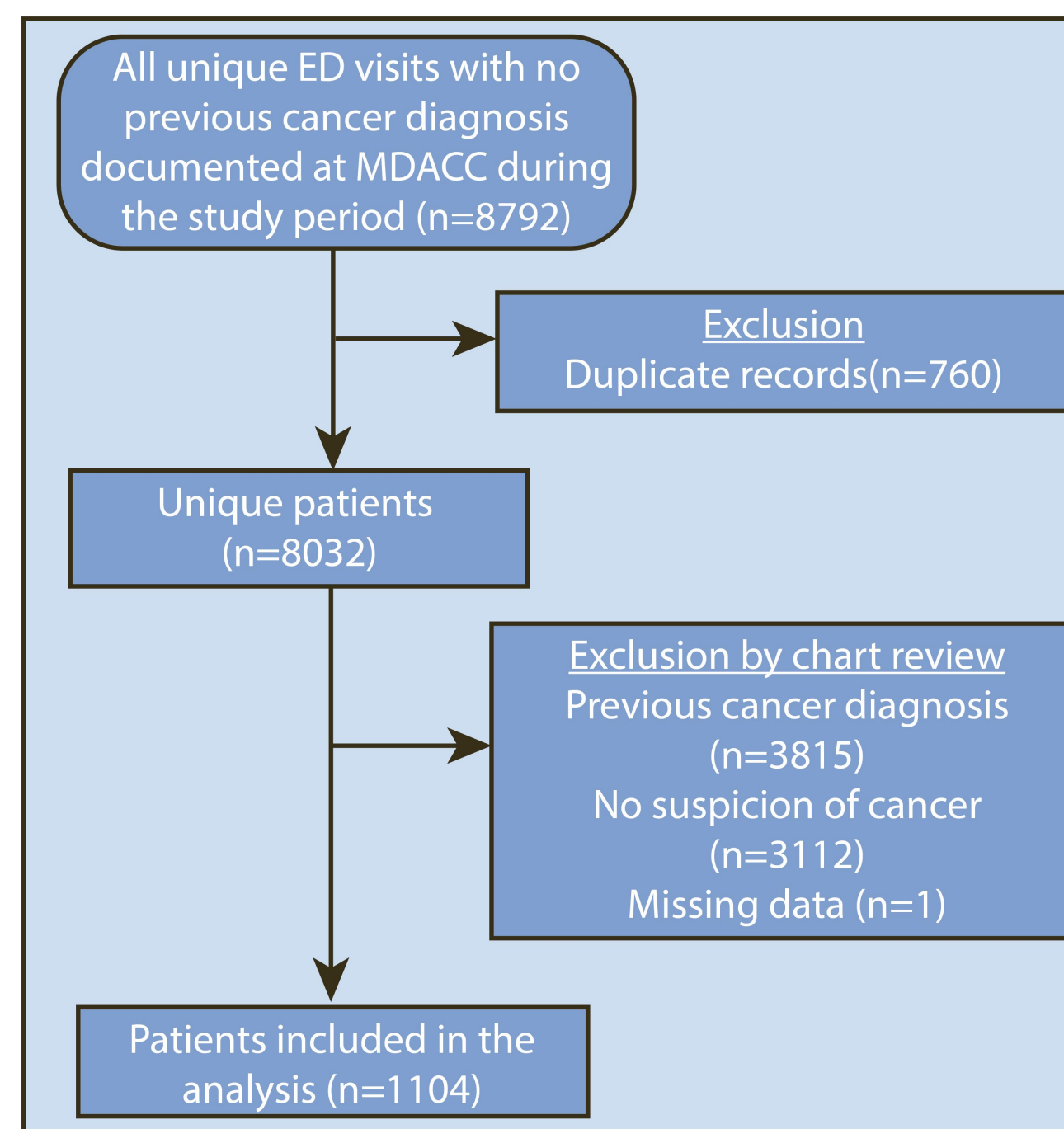
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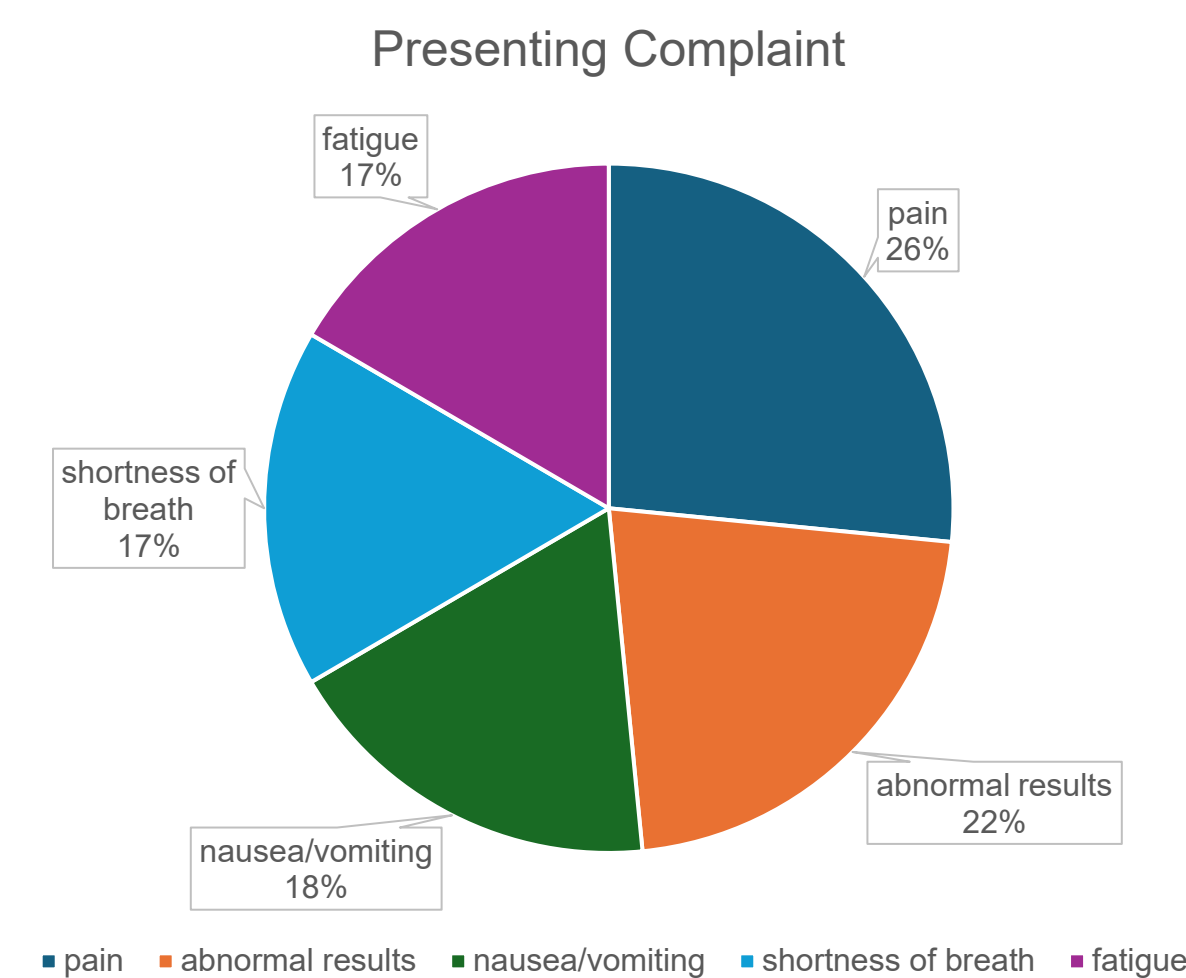
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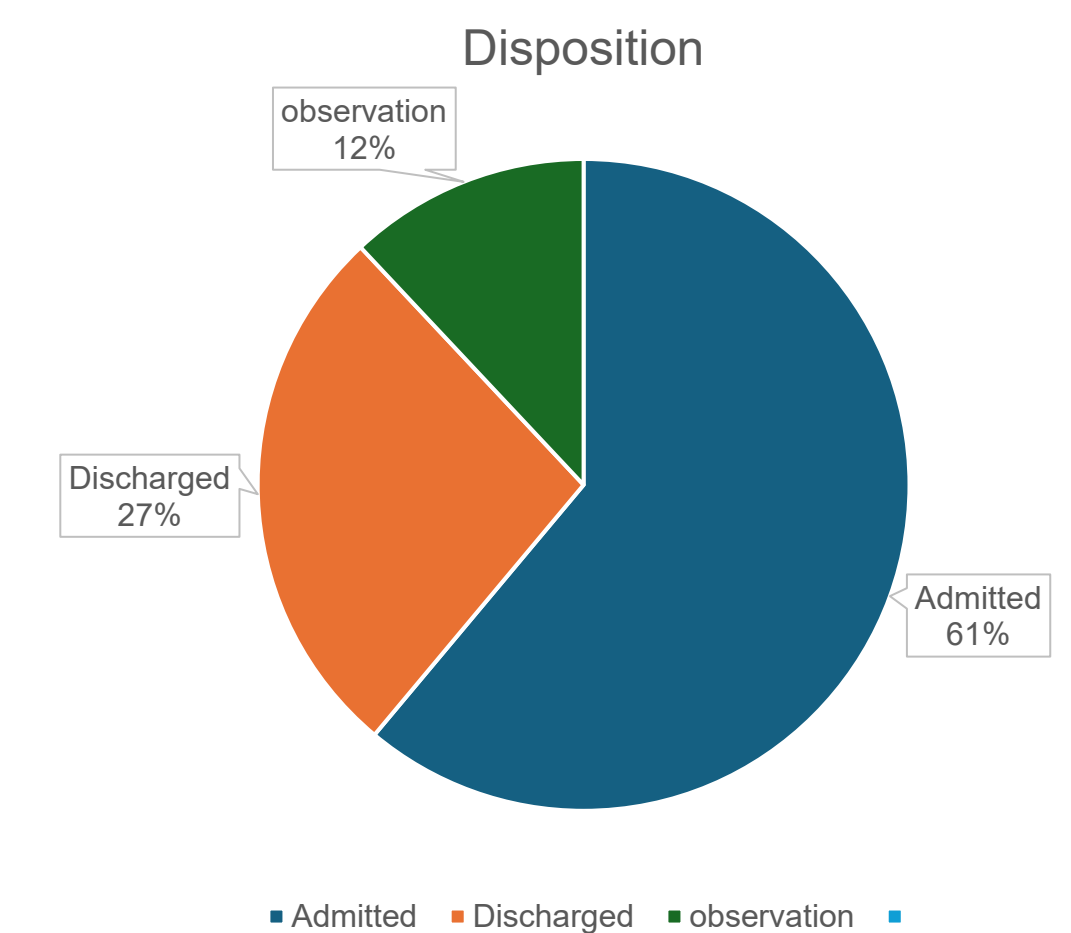
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