

## Supplementary Online Content

Caterino JM, Adler D, Durham DD, et al. Analysis of diagnoses, symptoms, medications, and admissions among patients with cancer presenting to emergency departments. *JAMA Netw Open*. 2019;2(3):e190979. doi:10.1001/jamanetworkopen.2019.0979

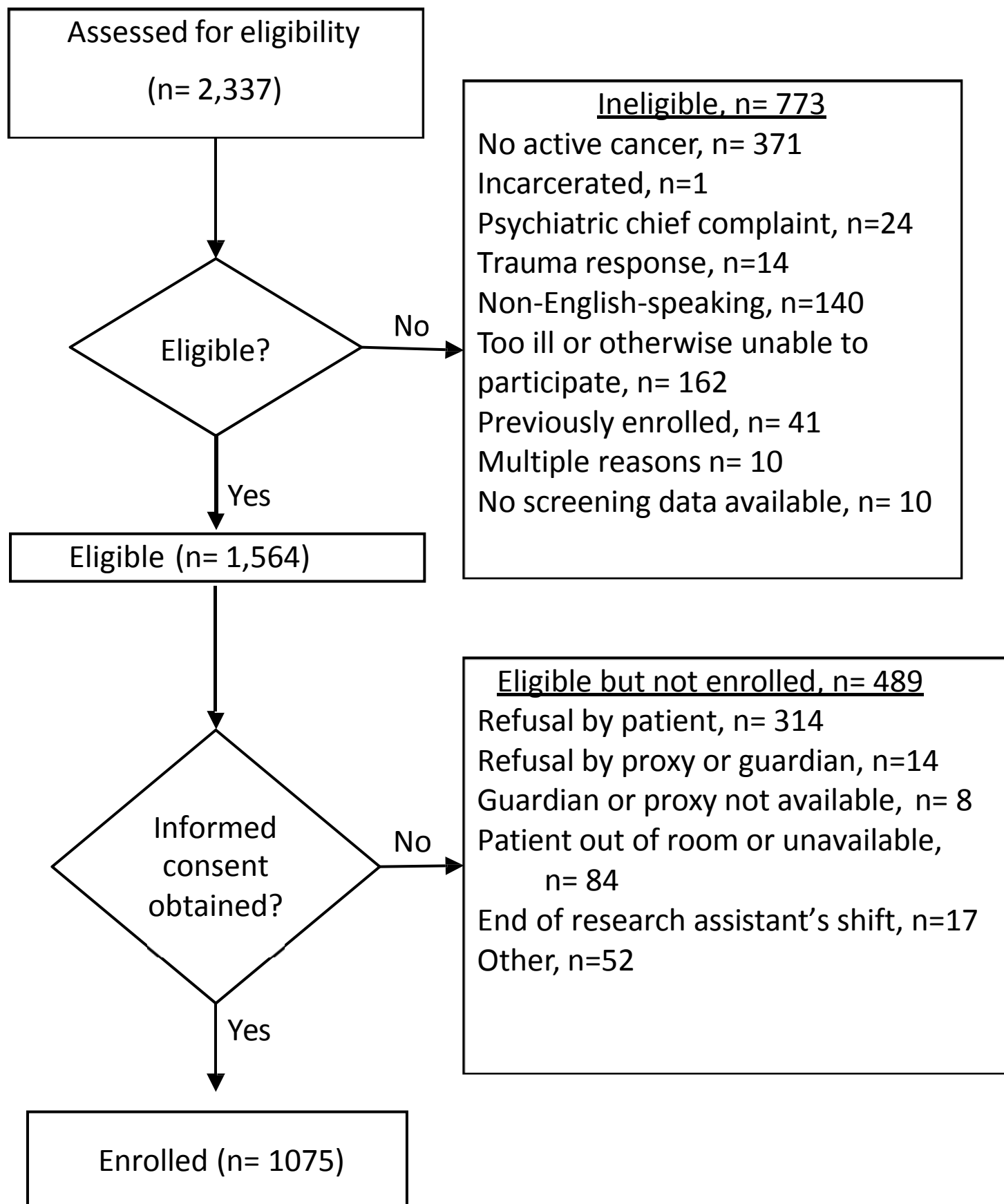
**eFigure.** Study Enrollment Diagram

**eTable 1.** Characteristics of Participating Emergency Departments

**eTable 2.** Interrater Reliability of Medical Record Review in 1075 Emergency Department Patients With Cancer

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Study Enrollment Diagram



| <b>Emergency Department</b>  | <b>City, State</b> | <b>Type</b>  | <b>Annual patient volume</b> | <b>ED admission rate</b> | <b>ED active cancer patients*</b> | <b>EM residency</b> | <b>Designated cancer ED**</b> | <b>Affiliated with NCI Comprehensive cancer center</b> | <b>Number subjects enrolled</b> |
|--|--------------------|--|------------------------------|--------------------------|-----------------------------------|---------------------|-------------------------------|--|---------------------------------|
| The Ohio State University Wexner Medical Center  | Columbus, OH       | Urban, Level 1 Trauma Center, Academic               | 72,000                       | 30%                      | 15%                               | Y                   | Y                             | Y  | 70                              |
| NYU Bellevue Hospital Center   | New York, NY       | Urban, Level 1 Trauma Center, Academic               | 125,000                      | 20%                      | 2%                                | Y                   | N                             | Y  | 18                              |
| NYU Langone Medical Center   | New York, NY       | Urban, Academic                                      | 65,000                       | 30%                      | 4%                                | Y                   | N                             | Y  | 69                              |
| UT MD Anderson Cancer Center   | Houston, TX        | Urban, Academic                                      | 20,000                       | 40%                      | 100%                              | Y                   | Y                             | Y  | 70                              |
| Tampa General Hospital   | Tampa, FL          | Urban, Level 1 Trauma Center, Academic               | 90,000                       | 40%                      | 6%                                | Y                   | N                             | Y  | 45                              |
| Beaumont Royal Oak   | Royal Oak, MI      | Suburban, Level 1 Trauma center, Community teaching  | 125,100                      | 34%                      | 5-10%                             | Y                   | N                             | N  | 70                              |
| Beaumont- Troy Hospital  | Troy, MI           | Suburban, Level II Trauma Center, Community teaching | 85,000                       | 34%                      | 5-10%                             | Y                   | N                             | N  | 42                              |
| Brigham and Women's Hospital   | Boston, MA         | Urban, Level 1 Trauma Center, Academic               | 60,050                       | 29%                      | 10%                               | Y                   | N                             | Y  | 71                              |
| Yale University  | New Haven, CT      | Urban, Level 1 Trauma Center, Academic               | 90,000                       | 30%                      | 2%                                | Y                   | N                             | Y  | 72                              |
| Allegheny General Hospital   | Pittsburgh, PA     | Urban, Level 1 Trauma Center, Academic               | 55,000                       | 24%                      | 1.5%                              | Y                   | N                             | N  | 22                              |
| University of California-San Diego   | San Diego, CA      | Urban, Level 1 Trauma Center, Academic               | 80,000                       | 20%                      | 10%                               | Y                   | N                             | Y  | 48                              |
| Memorial Sloan Kettering Cancer Center   | New York, NY       | Urban, Academic                                      | 24,000                       | 47%                      | 95%                               | N                   | Y                             | Y  | 71                              |
| Beth Israel Deaconess Medical Center   | Boston, MA         | Urban, Level 1 Trauma Center, Academic               | 55,000                       | 30%                      | 15%                               | Y                   | N                             | Y  | 60                              |
| Saint Vincent Hospital   | Worcester, MA      | Urban, Level 2 Trauma Center, Community teaching     | 75,000                       | 35%                      | 15                                | Y                   | N                             | N  | 70                              |
| University of Washington   | Seattle, WA        | Urban, Level 1 Trauma Center, Academic               | 30,000                       | 30%                      | 10%                               | Y                   | N                             | Y  | 70                              |
| University of Rochester Medical Center   | Rochester, NY      | Urban, Level 1 Trauma Center, Academic               | 116,000                      | 26%                      | 4%                                | Y                   | N                             | N  | 71                              |
| University of Utah   | Salt Lake City, UT | Urban, Level 1 Trauma Center, Academic               | 50,000                       | 30%                      | 5%                                | Y                   | N                             | Y  | 66                              |
| University of Cincinnati   | Cincinnati, OH     | Urban, Level 1 Trauma Center, Academic               | 76,800                       | 20%                      | 1.5%                              | Y                   | N                             | N  | 70                              |
| *Median proportion of cancer visits 8% (interquartile range 4-15%); mean proportion 17% (standard deviation 29%); **ED sees only patients with cancer (MSK/MD) or has a designated area specifically for cancer patients (OSU) |                    |  |                              |                          |                                   |                     |                               |  |                                 |

**eTable 2. Interrater Reliability of Medical Record Review in 1075 Emergency Department Patients With Cancer**

| Variable   | Kappa  |
|--|--------|
| Initial pain score   | 0.779  |
| Worst temperature  | 0.7991 |
| Worst systolic blood pressure  | 0.8479 |
| Worst heart rate   | 0.9435 |
| Worst respiratory rate   | 0.9395 |
| Worst pain score   | 0.8481 |
| Final pain score   | 0.7943 |
| Myocardial infarction  | 1      |
| Congestive heart failure   | 0.9119 |
| Cerebrovascular accident   | 0.5554 |
| Chronic obstructive pulmonary disease  | 0.6176 |
| Diabetes   | 0.9263 |
| Diabetes with end-organ damage   | 0.6624 |
| Metastases   | 0.648  |
| Mild liver disease   | 0.8289 |
| Severe liver disease   | 0.9148 |
| Chemotherapy in the past 30 days   | 0.7391 |
| Targeted drug therapy in the past 30 days  | 0.6764 |
| Systemic steroids in the past 30 days  | 0.4967 |
| Radiation therapy in the past 30 days  | 0.6825 |
| Surgery for cancer in the past 30 days   | 0.7313 |
| Advanced cancer  | 0.6195 |
| Note: Worst vital sign values were dichotomized as normal/abnormal as defined prior to abstraction |        |