

Predictors for 30-day readmission in patients with pancreatic cancer who had DNR code status

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Authors: J. Kaur¹, T. Mir², P. Singh³, S. Yadlapalli⁴, J. Goodman⁴

¹Internal Medicine, Saint Joseph Mercy Oakland Hospital, Pontiac, MI, United States of America, ²Internal Medicine, Wayne State, Detroit Medical Center, Detroit, AL, United States of America, ³Hematology and Oncology, Barbara Karmanos Cancer Institute, Detroit, AL, United States of America, ⁴Hematology and Oncology, Saint Joseph Mercy Oakland Hospital, Pontiac, MI, United States of America

BACKGROUND

- Pancreatic cancer (PAC) is a lethal malignancy, and most patients present with advanced disease.
- There is little known about the 30-day readmission rate in patients with Do-not resuscitate (DNR) code status in pancreatic cancer.

OBJECTIVES

The study aims to look for predictors of mortality and 30-day readmission among patients with pancreatic cancer who had DNR code status.

METHODS

Study design

Retrospective cohort study

Study population

- Age ≥ 18 years
- Diagnosis of Pancreatic cancer

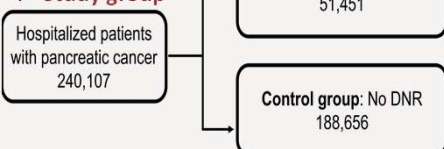
Data source

Healthcare Cost and Utilization Project (HCUP) national readmission (NRD) dataset files between 2016 – 2018 using ICD 9 and 10 codes.

Statistical analysis:

- Descriptive statistical analysis were used for demographic and comorbidities variables.
- The association with outcome was assessed using multivariate linear regression model.

Study group



Variables	Pancreatic cancer with DNR status		P value
	Present (n=51,451)	Absent (n=188,656)	
Age	68 ± 11	685 ± 12	
Sex (F)	25,884 (50.3%)	89,121 (47.2%)	<0.0001
Hypertension	33,062 (64.3%)	118,376 (63%)	0.0001
CHF	7,152 (14%)	18,660 (10%)	<0.0001
Cardiac shock	219 (0.5%)	320 (0.2%)	<0.0001
Diabetes	19,616 (38%)	74,692 (40%)	0.0001
Cardiac arrhythmia	12,924 (26%)	36,166 (19%)	<0.0001
PVD	4,072 (8%)	11,669 (6.2%)	<0.0001
Hypothyroidism	7,215 (14%)	23,763 (13%)	<0.0001
Renal failure	8,248 (16%)	21,248 (11.3%)	<0.0001
Liver disease	6,929 (13.5%)	18,915 (10%)	<0.0001
Obesity	2,813 (5.5%)	15,944 (8.5%)	<0.0001
Mortality in-hospital	11,221 (22%)	6,017 (3%)	<0.0001
Readmission	4,906 (12.2%)	43,396 (24%)	<0.0001

Table 1 Descriptive statistic of study population

RESULTS

- 51,451 (21.4%) PAC patients had DNR code status and mean age of 68 ± 11 .
- There were higher numbers of inpatient mortality in patients with DNR code status as compared to full code. (22% (DNR status) vs 3 % (full code) (Table 1).
- The significant readmission predictors for DNR status in PAC included chronic heart failure, renal failure, liver disease, obesity and hypertension (Table 2).
- Most patients were treated in urban teaching hospitals and Medicare was the primary payor in 70.4%.

CONCLUSION

In our study we observed higher inpatient mortality and readmission rates in pancreatic cancer who have DNR code status utilizing hospital resources and healthcare costs

FUTURE DIRECTIONS

Patients with advanced pancreas cancer who adopt DNR status be offered early hospice care to avoid inpatient mortality.

There is a need to look for data based on racial and ethnic differences.

Outcomes	Adjusted OR (95% CI)	P-value
COPD		
Absent	Reference	
Present	1.09 (0.97-1.23)	0.13
Heart failure		
Absent	reference	
present	1.24 (1.13-1.35)	<0.001
Cardiac arrhythmia		
Absent	reference	
Present	1.39 (1.31-1.48)	<0.001
Hypertension		
Absent	Reference	
Present	0.78 (0.73-0.83)	<0.001
Renal failure		
Absent	Reference	
Present	1.27 (1.14-1.41)	<0.001
Liver disease		
Absent	Reference	
Present	2.13 (1.98-2.29)	<0.001
Diabetes		
Absent	Reference	
Present	0.97 (0.92-1.02)	0.22
Peripheral vascular disease		
Absent	Reference	
Present	1.06 (0.95-1.18)	0.25
Obesity		
Absent	Reference	
Present	0.87 (0.78-0.97)	0.01
Service payer		
Medicare	Reference	
Medicaid	1.28 (1.14-1.43)	<0.001
Private	1.38 (1.26-1.51)	<0.001
Self-pay	2.0 (1.80-2.41)	<0.001

Table 2 The adjusted odds ratio of pancreatic cancer patient has DNR status.

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