

EVALUATION OF SCREENING & REFERRAL
FOR FOOD INSECURITY
IN KAISER PERMANENTE COLORADO
PRELIMINARY REPORT #3 (Revised with Table
2 reformatted)

December 16, 2016

Socio-demographic and Clinical Characteristics of Elderly KPCO Members with Food Insecurity



(Note: Table 2 has been reformatted from the version sent earlier today for better readability.)

Socio-demographic and Clinical Characteristics of Elderly KPCO Members with Food Insecurity

Elderly Medicare Advantage members in Kaiser Permanente Colorado (KPCO) are offered an annual Medicare Total Health Assessment (MTHA)

survey, which includes a screening question about food insecurity, “Do you always have enough money to buy the food you need?” In two prior Reports ([Preliminary Report #1](#) and [Preliminary Report #2](#)), we described the process through which 51,482 elderly KPCO members were screened for food insecurity between 2012 and 2015 and showed that 2,863 (5.6%) of those members had experienced food insecurity. This report describes socio-demographic and clinical differences between KPCO members who reported food insecurity and those who did not.

What socio-demographic characteristics are associated with food insecurity in elderly KPCO members?

Table 1 shows that women, KPCO members aged 75-84, and members of racial or ethnic minorities were more likely to report food insecurity than men, other age groups or white members. Members who received Medicaid as well as Medicare were particularly vulnerable.

Table 1. Socio-demographic characteristics and food insecurity (N = 51,482)

Characteristic	N	Prevalence of food insecurity (%)	P-value
Sex			<0.001
Male	23,146	5.0%	
Female	28,336	6.0%	
Age Group			<0.001
65-74	37,261	5.5%	
75-84	12,008	5.9%	
85 and older	2,213	4.6%	
Race and Ethnicity			<0.001
White	42,226	4.8%	
African-American	1,370	15.5%	
Hispanic or Latino	3,714	10.0%	
Other race or ethnicity	2,142	6.8%	
Medicaid insurance coverage			<0.001
No	50,288	5.1%	
Yes	1,254	24.0%	

What chronic health conditions are associated with food insecurity?

We identified the presence of 31 chronic health conditions, and calculated body-mass index for each member. **Table 2** demonstrates that food insecurity was slightly more prevalent in KPCO members with hypertension, diabetes or depression than in those without these conditions. Food insecurity was more common in individuals who had the lowest and highest BMI.

Table 2. Members with chronic health conditions are more likely to report food insecurity

Characteristic	N	Prevalence of food insecurity (%)	P-value
Hypertension			<0.001
Present	27,645	6.1%	
Absent	23,837	5.0%	
Diabetes			< 0.001
Present	7,959	7.8%	
Absent	43,523	5.1%	
Depression			< 0.001
Present	9,940	7.1%	
Absent	41,542	5.2%	
BMI			<0.001
Underweight (<18.5)	594	7.2%	
Normal weight (18.5-24.9)	15,473	4.9%	
Overweight (25.0 – 29.9)	20,472	5.2%	
Obese (30.0 – 39.9)	13,398	6.3%	
Extreme obesity (> 40.0)	1,545	10.0%	

What utilization patterns are associated with food insecurity?

We assessed utilization of different KP health services to completion of the MTHA. **Table 3** shows that, with the exception of long-term institutional stays, food insecurity was not strongly associated with utilization of KP services. Any differences were small in magnitude.

Table 3. Service utilization and food insecurity

Characteristic	N	Prevalence of food insecurity (%)	P-value
Outpatient care			0.004
Any outpatient visits	48,519	2663 (5.5%)	
No outpatient visits	2,963	200 (6.7%)	
Emergency department care			<0.001
Any ED visit	6,081	403 (6.6%)	
No ED visits	45,401	2460 (5.4%)	
Hospitalization			0.444
Any hospitalization	2,892	170 (5.9%)	
No hospitalizations	48,590	2693 (5.5%)	
Long-term institutional stay			0.617
Any stay	580	35 (6.0%)	
No stay	50,902	2828 (5.6%)	

Conclusions:

- The prevalence of food insecurity was 10.0% or greater in elderly KPCO members who were African-American, Hispanic or Latino, “dual eligible” for Medicare and Medicaid, or extremely obese. Other socio-demographic characteristics and clinical diagnoses were less strongly associated with food insecurity.
- Patterns of health care utilization in the prior year did not differ markedly between elderly KPCO members with food insecurity and those without.

What's next?

Our next preliminary report will compare the general health status, functional capabilities, and other member characteristics from the MTHA survey between KPCO members with food insecurity and those without.

Thoughts and Comments?

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