

# Referral rates for PCP follow-up in Hypertensive ED patients with a diagnosis of back pain- A retrospective analysis

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**Background:** ACEP recognizes that the ED is often the first contact for patients with findings of asymptomatic hypertension and recommends goal directed referral for close outpatient follow-up of these patients. However, there is a paucity of studies examining whether such referrals occur. We evaluated the proportion of hypertension specific outpatient referrals for a cohort of patients with a chief complaint of back pain that were found to be coincidentally hypertensive and were discharged home from the ED.

**Methods:** We conducted a retrospective, cross-sectional study at urban, teaching ED. Over an (XX month period), consecutive eligible patients age >17 years were included who met both criteria: 1) discharged from the ED with a final ICD-10 diagnosis that included lumbago, cervical back pain, thoracic back pain or lumbar back pain; and 2) SBP reading >140 mmHg at any point during ED stay as determined by structured EMR chart review by study authors. Within the structured review, authors also collected patient demographic/historical information, caring provider level (APP/physician), and, then, reviewed ED discharge instructions for goal directed referrals regarding elevated blood pressure. A second blinded author reviewed a sample of 25 previously reviewed records to assess for inter-rater reliability (kappa). Categorical data are presented as frequency of occurrence and analyzed by chi-square; continuous data are presented as means+/-SD and analyzed by t-tests. Odds ratios and 95% CIs were calculated. Multivariate logistic regression was performed to control for confounding. The primary outcome parameter was the proportion of study patients that had a goal directed referral in the discharge instructions for hypertension.

Results:

508 patients met back pain diagnosis criteria

293 were also hypertensive comprising the study group

- % Diagnoses (Column B)
- % Gender (Column I)
- mean age+/- SD (Column H)
- % Ethnicity by grouping (Column J)
- % Received Analgesics (Column F)
- % Received Antihypertensives (Column G)
- % History of Substance abuse (Column K)
- % History of Chronic Pain (Column L)
- % Prescriber level by grouping (Column M)
- % referred to PCP for follow up (Column O)

- % Received HTN goal directed DC instructions (Column P)

**Bivariate analysis—evaluate each independent variable above relationship with the dependent variable as the study outcome parameter referral to address hypertension (Column P) for relationship**

**Multivariate logistic regression or similar analysis to control for confounding again with the dependent variable as the study outcome parameter referral to address hypertension (Column P)**