Correlates of Care Seeking Among Adults with New or Flaring Symptoms

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BACKGROUND

- Disparities in access when care is clinically important exist independently of perception of need for those in the minority and uninsured populations. These inequities have been demonstrated for those with new acute symptoms using the Symptom Response Index (SRI).[1] The SRI is a question module used in health surveys that inquires about care-seeking behavior following the onset of any of 15 specific serious or morbid symptoms (Table 1) determined by clinical experts to warrant professional attention. In this way, the SRI objectively assesses unmet medical need.

RESEARCH OBJECTIVE

- To extend the investigation of access disparities to adults experiencing a flare-up of an ongoing symptom. This analysis combines the methodological strengths of the SRI with a comprehensive assessment of factors influencing health service utilization[2] to objectively detect disparities in care seeking for those in vulnerable populations with both acute *and* chronic symptomatic conditions.

METHODS

Data Source – 2009 New Jersey Family Health Survey (NJFHS)

- Statewide household survey collecting data on various health topics important for New Jersey policy formulation and evaluation.
- Random-digit-dialed (RDD) survey of 2,100 families with landlines and 400 families relying on cell phones.
- Overall response rate of 45.4%.
- Selected respondent was the person who was most knowledgeable about the health and health care needs of the family and answered questions concerning all related members of the household .

Study Population

5873	adults (age 18+) in NJFHS sample	
1770	with 1 or more symptoms	
1392	eligible for SRI question series (respondent and/or spouse)	
809	ongoing symptom	
422	new symptom	**= 583**
161	flare-up of symptom	SRI pop
536	SRI population and non-missing data on all analysis variables	

Key Predictors & Covariates

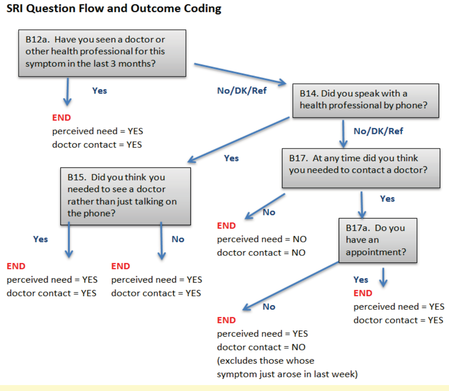
- Key predictors were indicators of vulnerability (race/ethnicity, income, insurance status, and citizenship status) and symptom nature (new vs. flare-up).
- Covariates chosen *a priori* : age, sex, care-seeking attitudes, symptom type, total number of symptoms, timing of symptom onset, and perceived health status.

Table 1: Symptoms used for the SRI Survey Module in the NJFHS

Serious Symptoms
Likely to represent an underlying disease that could cause death or disability if untreated
Shortness of breath when lying down, waking up, or with light work or exercise
Loss of consciousness or fainting
Unusually blurry vision or difficulty seeing
Severe, new, or more frequent headaches than usual
Sadness, hopelessness, frequent crying, or feelings of depression
Lump or mass in breast[a]
Chest pain that lasted more than a minute
Morbid Symptoms
Likely to have a high impact on quality of life but not very serious
Back pain or neck pain that made it very painful to walk a block or go up a flight of stairs
Cough with yellow sputum and a fever
Anxiety or nervousness that has kept you from doing the usual amount of work or social activities
Hip, knee, or leg pain that makes it difficult to walk a block or go up a flight of stairs
Sprained ankle that is too painful to bear weight
Fatigue, extreme tiredness, or generalized weakness
Great deal of difficulty starting urination or passing urine[b]
Difficulty hearing conversations or phone calls

a. Asked only of females
b. Asked only of males

SRI Question Flow and Outcome Coding



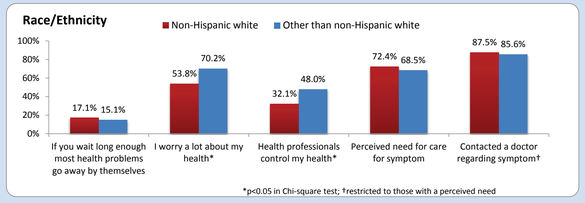
Statistical Analysis

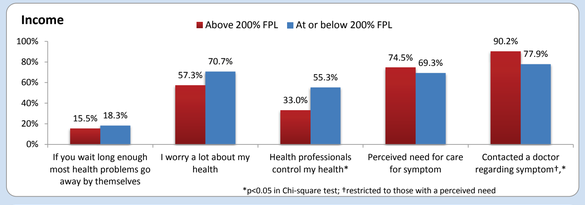
- Chi-square tests by key predictors on care-seeking attitudes, symptom-specific perception of need for care, and whether contact had been made with a doctor regarding the symptom.
- Two multiple logistic regression models to identify differences in perception and disparities in access for vulnerable subpopulations:
  - Outcomes modeled: 1) Perceived need for care, and 2) Having any contact with a doctor regarding the symptom (restricted to those with a perceived need for care)
  - Controlled for care-seeking attitudes, need factors, and other predisposing and enabling factors influencing health service use
  - Indicator of symptom nature tested for significance as a need factor

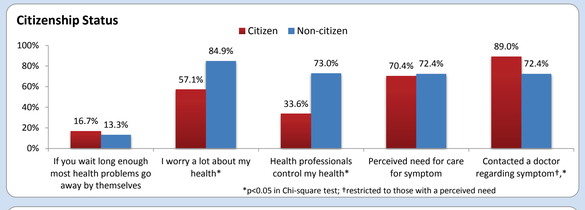
PRINCIPAL FINDINGS

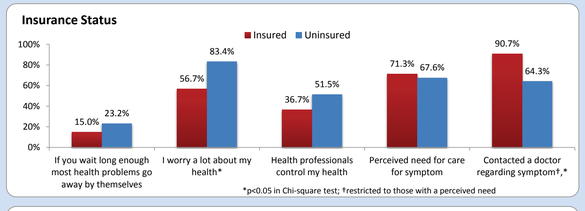
Bivariate Analyses

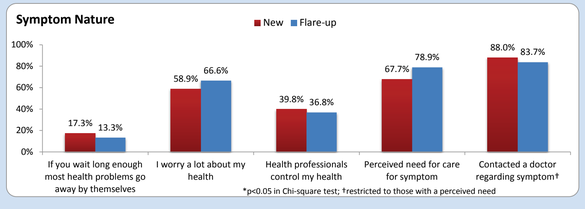
Healthcare Attitudes, Perception of Need, and Care Seeking by Indicators of Vulnerability







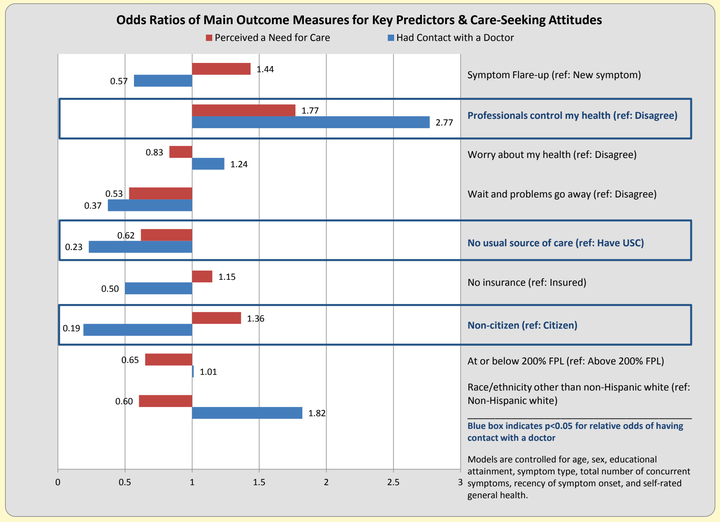




PRINCIPAL FINDINGS (Cont.)

Multivariate Analyses

Odds Ratios of Main Outcome Measures for Key Predictors & Care-Seeking Attitudes



Blue box indicates p<0.05 for relative odds of having contact with a doctor

Models are controlled for age, sex, educational attainment, symptom type, total number of concurrent symptoms, recency of symptom onset, and self-rated general health.

Summary of Results

- Vulnerable populations "worry more about their health" and more often "believe that health professionals control their health".
- Differences in attitudes ≠ differences in perception of need for new or flaring symptoms.
- Low-income (≤200% FPL) adults, non-citizens, and those who lack insurance are less likely to contact a doctor regarding their new or flaring symptom. In controlled analyses, only citizenship status remains significantly associated with care utilization.
- Insurance status does not explain disparities for immigrants in our study population. Non-citizens with a perceived need for care have lower odds of contacting a doctor about their symptom than citizens with a perceived need for care (OR=0.19, p=0.006).
- Those with no insurance do not have significantly lower odds of contacting a doctor compared to those with insurance (in contrast to previous research with the SRI showing disparities in access by insurance status among those with new symptoms).

- Adults without a usual source of care (which is highly correlated with insurance status) have 77% lower odds of seeking medical attention for their new or flaring symptom.
- Adults with new symptoms and adults with flare-ups of ongoing symptoms have similar attitudes about health and healthcare.
- Symptom nature is not associated with perceived need for care nor with whether a doctor is contacted for the symptom. However, because of low incidence of flare-ups compared to new symptoms, we may have lacked power to detect differences. Symptom nature may still be a necessary control variable in future analyses.

Limitations

- Small sample
- Cross-sectional, cannot determine causality
- Respondents' attitudes were attributed to their spouses
- Sample not representative of all adults in NJ with new or flaring symptoms

CONCLUSIONS

Failure to seek medical attention among vulnerable populations with an objectively identified and perceived need for care suggests the existence of barriers for some in New Jersey's healthcare delivery system. The choice to seek care is associated with immigration status and enabling factors such as having a USC. These disparities exist independently of any substantial variation in symptom nature, severity, and duration, as well as independently of other major factors and attitudes that may drive health service utilization.

IMPLICATIONS FOR POLICY, DELIVERY, OR PRACTICE

Insurance coverage increases brought about by the ACA are not likely to eradicate all access disparities. For New Jersey adults with new or chronic health needs, policies encouraging establishment of a USC and sources of care which are hospitable to immigrants should be the next steps in creating equitable conditions under which consumers can make choices about their health care.

Selected References
1. Baker DW, Shapiro MF, Schur CL, Freeman H. A Revised Measure of Symptom-Specific Health Care Use. *Soc. Sci. Med.* 1998; 47(10): 1601-1609.
2. Anderson RM. Revisiting the behavioral model and access to medical care: Does it matter? *J of Health Soc Behav.* 1995; 36(1): 1-10.

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