

# Continuity of Care for Florida Medicaid Primary Care Utilizers with Psychological Conditions

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# Primary care is the most frequent site for psychological treatment

- 50% of individuals with a psychological disorder seek treatment from PCP (Narrow, 1993)
- 25% of patients seen in PC suffer from a psychological disorder (Spitzer, 1995)
- Rates of MDD in PC range from 5-10% percent (Katon & Schulberg, 1992)
- Second to hypertension, depression is more common in PC than any other condition (Ballenger, 1999)

# Medicaid and Mental Health

- Medicaid pays for a broad range of MH services
  - acute hospital services
  - psychosocial rehabilitation
  - psychotropic medications
- 20% of total MH care spending in the U.S. came from Medicaid in 1997 (Frank, 2003)
- MH care accounts for 9-13% of total Medicaid spending (Mark, 2003)
- >20% of Medicaid beneficiaries used MH services in 1995 (Frank, 2003)

# Continuity of Care

- Patients are increasingly seen by an array of providers in a wide variety of organizations
- Raises significant concerns about fragmentation of care
- Especially relevant for Medicaid population

# Continuity of Care

- Studies have shown that patients with high continuity are
  - More satisfied with care
  - More likely to take medications correctly
  - More likely to have problems identified

# Continuity of Care

- Patient:
  - Perception that provider who knows them will care for them in the future
- Provider:
  - Perception that they have sufficient knowledge and information about a patient to best apply their professional competence
  - Confidence that their care inputs will be recognized and pursued by other providers

# Role of continuity in preventing hospitalizations

- Continuity of care is associated with decreased future likelihood of hospitalization (Gill & Mainous, 1998)
- Policies that encourage patients to concentrate their care with a single provider may lead to lower hospitalization rates and lower health care costs

# Current Study

- To our knowledge, no study has examined the continuity of care and associated health care costs of treating non-psychotic psychological conditions in the Medicaid population
- Understanding this interaction in primary care, where most individuals seek treatment for non-psychotic psychological conditions, allows for more appropriate management of these diseases, improvement of clinical outcomes, and reduction of costs



# Current Study

- To examine continuity effects for Medicaid primary care patients with psychological diagnoses
- To operationalize and measure continuity of care
- To compare high continuity and low continuity patients on demographic dimensions, utilization, and cost outcomes
- To develop models using continuity of care, psychological diagnoses, and demographics to predict utilization and cost in Medicaid

# Methodology

- Eligible study participants included all Florida Medicaid Medipass recipients with a diagnosis of a psychological condition made by a primary care physician (i.e., Family Practice, General Practice, Internal Medicine, OB/GYN, or Pediatrics) during the month of June 2001
- Recipients were then systematically excluded if they were 1) diagnosed with the same disorder within the previous 180 days; 2) not continuously eligible for Medicaid 180 days before the index diagnosis date; or 3) under the age of 18 or over age 65 as of June 1, 2001.

Disease	ICD-9 Code	Count
Acute Reaction to Stress	308.00	0
Adj. React. w/ Anx. Mood	309.24	0
Adj. React. w/ mixed feactures	309.28	1
Adj. React. w/ Dep. Sx	309.0-309.1	11
Agoraphobia w/ panic	300.21	1
Agoraphobia w/o panic	300.22	0
Anxiety State Unspecified	300.00	210
Depression NOS	311	210
Dysthymia	300.4	64
Generalized Anxiety Disorder	300.02	31
MDD recurrent	296.30-296.36	27
MDD single	296.20-296.26	37
OCD	300.30	0
Other Anxiety State	300.09	0
Other isolated or simple phobia	300.29	0
Panic Disorder	300.01	22
Phobia Unspecified	300.20	0
PTSD	309.81	2
Social Phobia	300.23	0
Specific Disorders of Sleep	307.40-307.49	2

# Diagnostic Clusters

Cluster	Disease Presentation	ICD-9 Code	Count
1	Nonspecific Depression		
	Depression NOS	311	210 (34%)
	Adj. React. w/ Dep. Sx	309.0-309.1	11 (0.02%)
2	Specific Depression		
	MDD, single	296.20-296.26	37 (0.06%)
	MDD, recurrent	296.30-296.36	27 (0.04%)
	Dysthymia	300.4	64 (0.10%)
3	Nonspecific Anxiety		
	Anxiety Unspecified	300.00	210 (34%)
4	Specific Anxiety		
	Panic Disorder	300.01	22 (0.04%)
	GAD	300.02	31 (0.05%)
	PTSD	309.81	2 (0.003%)

Group	Diagnosis Presentation	Average Paid Claims						Total
		Count	Inpatient	Outpatient	ER	Physician	Pharmacy	
1	Depression unchanged	229	\$4,159	\$148.93	\$266.73	\$38.20	\$63.65	\$76.95
2	Anxiety unchanged	174	\$3,300	\$136.86	\$268.33	\$37.74	\$55.61	\$62.11
3	Nonspecific Depression -> Specific Depression	40	\$3,054	\$162.56	\$262.99	\$36.33	\$64.53	\$73.15
4	Nonspecific Depression -> Specific Anxiety	23	\$3,101	\$113.57	\$264.35	\$50.23	\$65.40	\$78.48
5	Nonspecific Depression -> Nonspecific Anxiety	6	\$4,003	\$130.06	\$290.36	\$34.70	\$75.79	\$99.70
6	Specific Depression -> Nonspecific Depression	37	\$5,380	\$146.45	\$263.92	\$37.97	\$75.82	\$95.25
7	Specific Depression -> Nonspecific Anxiety	17	\$4,143	\$91.73	\$243.17	\$32.27	\$75.31	\$80.77
8	Nonspecific Anxiety -> Specific Depression	33	\$3,318	\$148.10	\$239.84	\$42.52	\$52.00	\$68.59
9	Nonspecific Anxiety -> Specific Anxiety	33	\$3,724	\$116.70	\$263.80	\$53.60	\$70.27	\$84.98
10	Nonspecific Anxiety -> Nonspecific Depression	9	\$5,099	\$152.38	\$177.68	\$35.66	\$45.71	\$66.80
11	Specific Anxiety -> Nonspecific Depression	5	\$7,697	\$39.87	\$332.30	\$33.74	\$51.37	\$111.27
12	Specific Anxiety -> Nonspecific Anxiety	6	\$1,604	\$102.36	\$245.39	\$41.54	\$59.02	\$62.40

# Continuity Score

- Adapted from Gill & Mainous (1998)

$$CS = 1 - \frac{\text{No. of Providers}}{\text{No. of Medical Claims} + 0.1}$$
$$1 - \left( \frac{1}{\text{No. of Medical Claims} + 0.1} \right)$$

- Range: 0-1
  - 0 (each claim different provider)
  - 1 (each claim same provider)

# Next Steps

- Increase sample size
- Examine continuity of care and diagnosis issues related to
  - Cost
  - Utilization (i.e., LOS, ER visits, ambulatory visits)
- Develop predictive models and likelihood ratios