



Estimating Incident Leiomyoma Diagnosis in an HMO

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METHODS

Background

The Black Women's Health Study has used self-report of incident leiomyoma (fibroid) diagnosis in their analyses of risk factors for fibroids, comparing women diagnosed with those not yet diagnosed in a cohort of *Essence* magazine subscribers, members of Black professional organizations, and their friends and relatives.

Actual frequency of fibroid diagnosis has not been well-studied in a defined population of women with ready access to healthcare. Even less is known about the healthcare experience of women once they have received a diagnosis, such as frequency of ultrasound and treatment.

Goal

Determine annual incidences and the 5-year cumulative incidence of uterine fibroid diagnosis in a fixed cohort of women with ready access to healthcare and explore their health experiences.

Study Population

- ✓ Women ages 18-50 in 1995
- ✓ *Continuously* enrolled in the Health Alliance Plan HMO 1995-2002
- ✓ Aligned with a Henry Ford Health System provider
- ✓ Excluded women with both no fibroid diagnosis AND a hysterectomy in 1995-1996.

Data

- ✓ All inpatient and outpatient medical claims data with diagnosis and procedure codes 1995-2002
- ✓ All prescription drug claims data 1995-2002

Approach

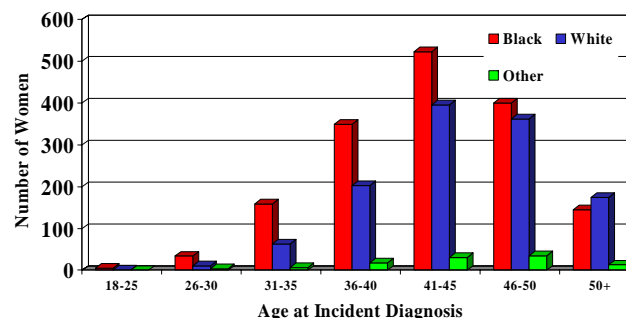
We estimated incident diagnoses by observing fibroid diagnoses after a "wash-out" period of 2 years (1995-1996).

Incident Fibroid Diagnosis:

- No fibroid diagnosis (ICD=218) in 1995 or 1996 **AND**
- Fibroid diagnosis (ICD=218) in 1997-2002

RESULTS

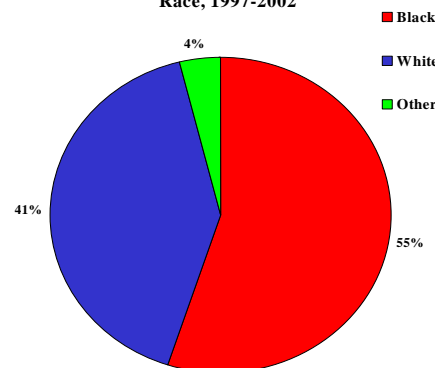
Counts of Incident Fibroid Diagnoses by Age and Race (n=2932)



Incidence

- ✓ Of the 27,958 in the fixed cohort, 1312 (5%) had a fibroid diagnosis in 1995-96, 2932 (10%) had an incident fibroid diagnosis in 1997-2002.
- ✓ The 1997-2002 5-year cumulative incidence of diagnosis was 11%; the annual diagnosis incidence rate was approximately 2% each year, 1997-2002.
- ✓ Black women tended to be younger (mean=43.2; SD=5.8) than White women (mean=45.0; SD=5.5) at age of incident diagnosis (p<0.05).

Distribution of Incident Diagnoses by Race, 1997-2002



1995-2002 Health Experience of those with Incident Diagnosis and No Fibroid Diagnosis

	Incident Fibroid Diagnosis in 1997-2002 (n=2932)	No Fibroid Diagnosis in 1995-2002 (n=23,714)
Hysterectomy	21%	1%
Had a Pelvic or Transvaginal Ultrasound	84%	23%
Diagnosed with Anemia	31%	12%
≥ 7 Visits to the Gynecologist	61%	37%
ER Visit for Fibroids	3%	NA

DEMOGRAPHICS OF STUDY POPULATION

Age in 1995*	Black (37%)	White (59%)	Other (4%)	Total
18-25	857 (8%)	857 (5%)	86 (7%)	1800 (6%)
26-30	1264 (12%)	1842 (11%)	150 (13%)	3256 (12%)
31-35	1836 (18%)	2970 (18%)	222 (19%)	5028 (18%)
36-40	2347 (23%)	3968 (24%)	272 (23%)	6587 (24%)
41-45	2378 (23%)	3899 (24%)	263 (22%)	6540 (23%)
46-50	1617 (16%)	2927 (18%)	203 (17%)	4747 (17%)
Total	10,299	16,463	1196	27,958

*Mean age=38.3 (SD=7.3); Age-specific percents are for column.

CONCLUSIONS

- ✓ Some very young women received a fibroid diagnosis – including those under age 30.
- ✓ Black women tended to be younger than white women at age of incident diagnosis and comprised a disproportionately larger group of those diagnosed.
- ✓ Further evidence is needed to understand what happens to the healthcare of women once they are diagnosed with fibroids. Fibroids are likely diagnosed after they have become quite problematic and likely require major intervention at that time. Perhaps earlier detection would allow for earlier and less invasive intervention.

STRENGTHS & LIMITATIONS

- Limitations:**
- ✓ Some "incident" diagnoses may not have actually been the first for a woman. However, by using a 2-year "wash-out" period, this misclassification should be minimized.
- Strengths:**
- ✓ Large, diverse population with ready access to health care
 - ✓ We have claims data to further explore the health experience of the women.