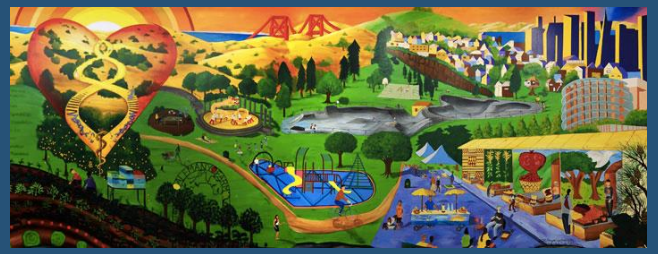

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Cervical Cancer Screening for Women with Severe Mental Illness

April 21, 2018

ASCCP Improving Lives Through the Prevention & Treatment of Anogenital & HPV-Related Diseases

ASCCP2018 Annual Meeting

Disclosures

- Current
  - NIMH R01 (R01MH112420)
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Overview

- People with severe mental illness (SMI) as a health disparity population
- Cervical cancer prevalence among women with SMI
- Cervical cancer screening among women with SMI
- Pragmatic guidance for providers, including novel programs
- Opportunities for cervical cancer prevention

People with SMI: A Health Disparities Population

- In the US, 19 million adults live with SMI (6% of the US population).
- People with SMI die 25-30 years earlier than the general population, often from cardiovascular disease
- People with SMI utilize community mental health clinics significantly more often than primary care

Olfson 2015; Colton 2006; Druss 2008, Alakeson 2010; Copeland 2009; Goldman 2018

Cancer Prevalence among Women with SMI

- Breast Cancer Prevalence = 12%
  - Note: A recent JAMA Psychiatry meta-analysis found breast cancer incidence among women with schizophrenia is higher than the general population; however, significant heterogeneity existed among the included studies
- Cervical Cancer Prevalence = <1%
- Although cancer incidence overall is similar, there is a 30% higher case fatality rate among psychiatric patients when compared to the general population.
  - A cohort study found that psychiatric patients are more likely to have metastases at diagnosis and less likely to receive specialized treatment. ←opportunity to improve care

NIH 2018; Kisley 2013; James 2017, Zhuo 2018

Cervical Cancer Risk Factors among Women with SMI

- Risk Factors
  - Sexually Transmitted Infection (STI)
  - Poor Standard of Care
    - Low STI screening and treatment
    - Poor contraceptive care
    - Poor perinatal care
  - Smoking

James 2017; Zhuo 2018

Cervical Cancer Screening among Women with SMI

- Retrospective cohort study
- Inclusion criteria
  - Women Medi-Cal Recipients, ≥18; taking an antipsychotic medication (98% SGAs); treated at a CMHC; Not Medicare dual-eligible
- Outcome measure
  - Pap screening (CPT/HCPCS 88141–88143, 88147, 88148, 88150, 88155, 88164, 88167, 88174, and 88175)
- Analysis
  - Poisson regression with robust standard errors to account for clustering by county

Low Rates of Cervical Cancer Screening

Rates of Cervical Cancer Screening Among Women With Severe Mental Illness in the Public Health System

Monique James, M.D., Melanie Thomas, M.D., M.S., Latoya Frolov, M.D., M.P.H., Nicholas S. Riano, B.A., Eric Vittinghoff, Ph.D., Dean Schillinger, M.D., John W. Newcomer, M.D., Christina Mangurian, M.D., M.A.S.

Objective: This study aimed to determine cervical cancer screening rates among women with severe mental illness.

Methods: California Medicaid administrative records (2010–2011) for 31,308 women with severe mental illness were examined. Participants received specialty mental health services and were not dually eligible for Medicare. Poisson models assessed association between selected predictors and cervical cancer screening.

Results: Overall, 20.2% of women with severe mental illness received cervical cancer screening during the one-year period. Compared with white women, Asian women (adjusted risk ratio [ARR]=1.23), black women (ARR=1.10), and Hispanic women (ARR=1.11) ($p<.001$) were more likely to have been screened. Women ages 28–37 were more likely than those ages 18–27 to have been screened (ARR=1.31, $p<.001$). Evidence of other health care use was the strongest predictor of screening (ARR=3.07, $p<.001$).

Conclusions: Most women in the sample were not regularly screened for cervical cancer. Cervical cancer screening for this high-risk population should be prioritized.

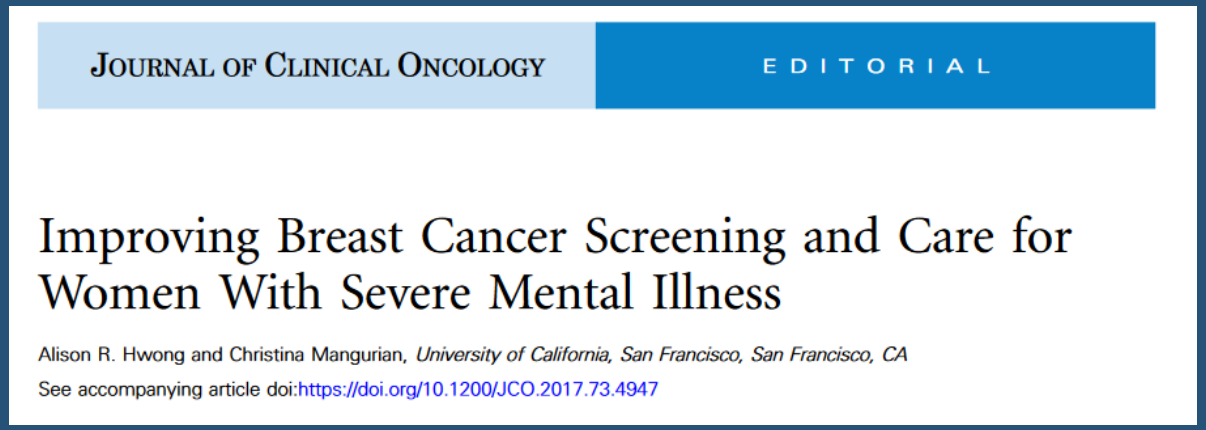
Psychiatric Services 2017; 68:839–842; doi: 10.1176/appi.ps.201600293

- Only 20% of women were screened (6,332/31,308)
- This is less than half that of the general population of women in California during the same period (42%)

James 2017

Low Rates of Breast Cancer Screening

- 26% received breast cancer screening, again, significantly lower than the general population (43%)
- Recent evidence suggests that women with SMI experience later presentation to care and delayed diagnosis.

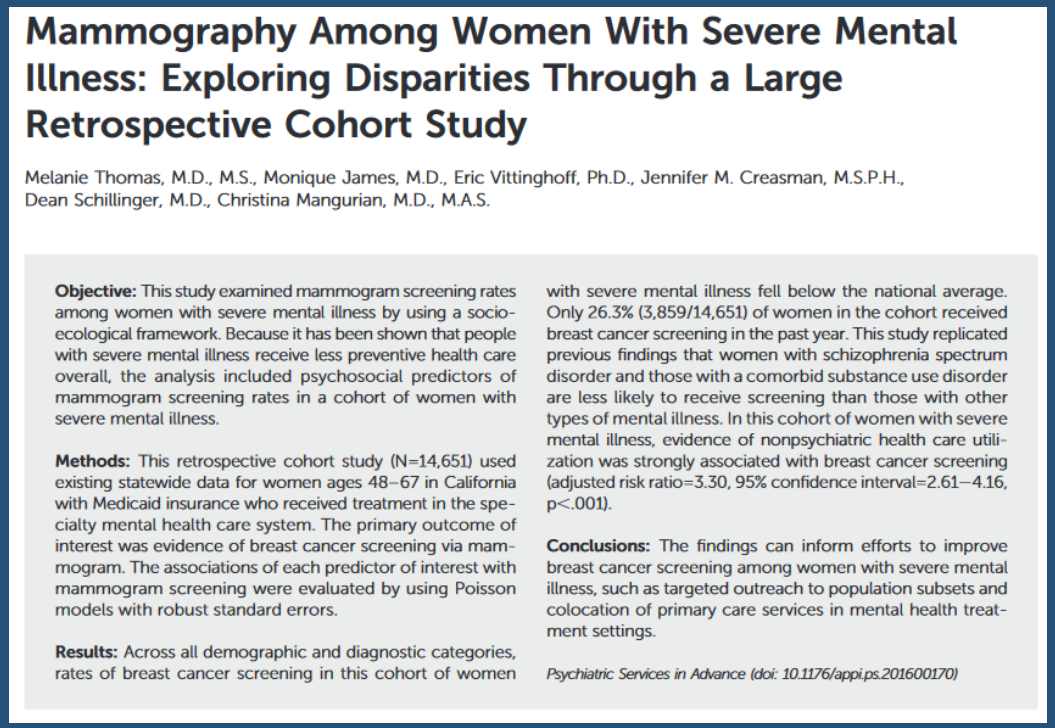


JOURNAL OF CLINICAL ONCOLOGY | EDITORIAL

Improving Breast Cancer Screening and Care for Women With Severe Mental Illness

Alison R. Hwong and Christina Mangurian, *University of California, San Francisco, San Francisco, CA*

See accompanying article doi:https://doi.org/10.1200/JCO.2017.73.4947



Mammography Among Women With Severe Mental Illness: Exploring Disparities Through a Large Retrospective Cohort Study

Melanie Thomas, M.D., M.S., Monique James, M.D., Eric Vittinghoff, Ph.D., Jennifer M. Creasman, M.S.P.H., Dean Schillinger, M.D., Christina Mangurian, M.D., M.A.S.

Objective: This study examined mammogram screening rates among women with severe mental illness by using a socio-ecological framework. Because it has been shown that people with severe mental illness receive less preventive health care overall, the analysis included psychosocial predictors of mammogram screening rates in a cohort of women with severe mental illness.

Methods: This retrospective cohort study (N=14,651) used existing statewide data for women ages 48–67 in California with Medicaid insurance who received treatment in the specialty mental health care system. The primary outcome of interest was evidence of breast cancer screening via mammogram. The associations of each predictor of interest with mammogram screening were evaluated by using Poisson models with robust standard errors.

Results: Across all demographic and diagnostic categories, rates of breast cancer screening in this cohort of women with severe mental illness fell below the national average. Only 26.3% (3,859/14,651) of women in the cohort received breast cancer screening in the past year. This study replicated previous findings that women with schizophrenia spectrum disorder and those with a comorbid substance use disorder are less likely to receive screening than those with other types of mental illness. In this cohort of women with severe mental illness, evidence of nonpsychiatric health care utilization was strongly associated with breast cancer screening (adjusted risk ratio=3.30, 95% confidence interval=2.61–4.16, p<.001).

Conclusions: The findings can inform efforts to improve breast cancer screening among women with severe mental illness, such as targeted outreach to population subsets and colocation of primary care services in mental health treatment settings.

Psychiatric Services in Advance (doi: 10.1176/appi.ps.201600170)

Meet the patients where they are.

I want to leverage strong public-academic partnerships to improve the public health care system that people with SMI already use…specialty mental health settings.

Development of Project PETIT

- Steering committee developed:
  - OB/GYN
  - Psychiatry
  - Front-line staff
  - Trainees
- Reviewed evidence-base
- Local data revealed that only 25% were up-to-date on cervical cancer screening
- Planned a co-located satellite clinic
- Met monthly to work out admission criteria, referral, patient flow, staffing, documentation, data collection
- Project PETIT: inpatient Psychiatry women's health Education and Testing Integration Team

James 2018, Psychiatric Services Under Review

Nuts and Bolts of Project PETIT (I)

- 12 week pilot clinic
- One half-day per week with 4 appointment slots
- Located on inpatient psychiatry unit, but staffed by OB/GYN team (primarily residents) with psychiatry nursing.
- Services offered
  - Pap smears
  - Breast and pelvic exams
  - STI testing
  - Contraception counseling, placement and removal
  - Pregnancy care

James 2018, Psychiatric Services Under Review

Nuts and Bolts of Project PETIT (II)

- Dedicated treatment room on the inpatient psychiatry unit
- This room had supplies (speculums, culture swabs, sterile syringes, and a privacy curtain).
  - Worked with billing and pharmacy departments to ensure supplies were stocked and accessible.
- Any woman, regardless of age, could be referred.
- Inpatient psychiatric team assessed patient's mental status, capacity to consent, and ability to tolerate the visit

James 2018, Psychiatric Services Under Review

PETIT pilot findings

- 10 clinics attended by 15 women (average of 1.5 women per week)
- All patients received general preventive health education; 7 pap smears; 7 STI screenings; 6 contraception services; 4 breast exams; &2 pregnancy care visits.
- Department determined PETIT clinic would continue due to high interest
- Continues to this day.

Needs and voices of these women (I)

- **Patient 1, 34 years old**
  - No women's care for 5+ years
  - Received Pap, STI Testing, Contraception
  - "*This is such a great service*"
- **Patient 2, 38 years old**
  - Engages in unprotected sex with man who is likely sleeping with prostitutes
  - "*I want everything*"
  - Received GC/CL, pap smear
- **Patient 3, 35 years old**
  - Engages in unprotected sex
  - Sexually assaulted in prior year
  - "*What's your contraception method?*"

    "*Withdrawal*."

Need and voices of these women (II)

- **Patient 4, 38 years old**
  - Engages in unprotected sex
  - Received STI testing and Pap smear
  - *"When's the last time you were sexually active?" "The last time I AWOL'ed from the [locked step-down unit]!"*
- **Patient 5, 37 years old**
  - Received STI testing and IUD removal
  - "*When was your Mirena placed?" "Maybe 2006-7*?"
- **Patient 6, 28 years old**
  - Received IUD removal, placement, and Pap smear
  - *"I was slammed on the table, not given pain meds, crying" "Thank you for not hurting me… you guys are angels"*

What about bringing GYN services to outpatient community mental health?

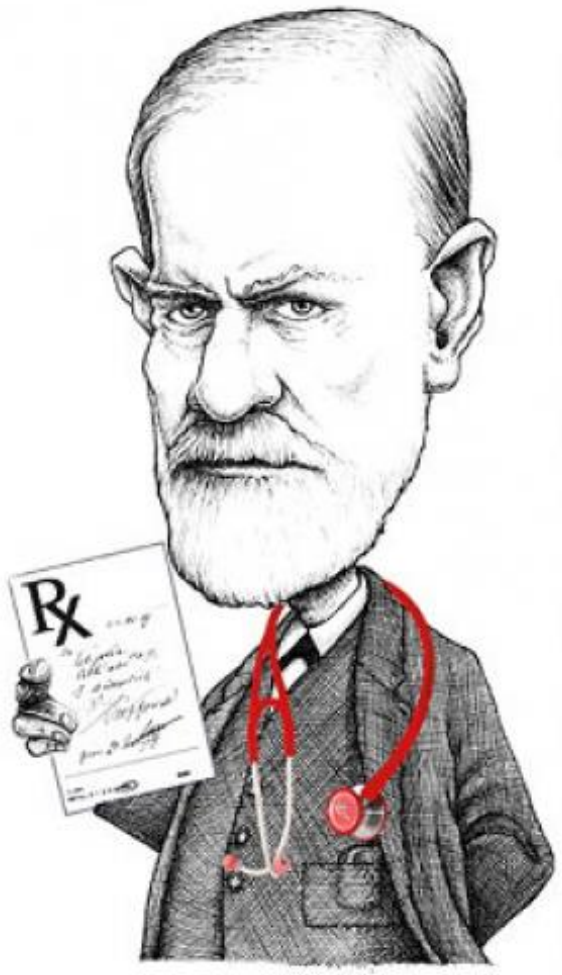
Satellite Clinics

- Many people with SMI use psychiatric clinics as their "*de facto*" health home

- Interventions that target medical care at satellite FQHC clinics within specialty mental health settings have been effective in prior studies

- Population-health approaches should be applied to women served in these specialty mental health settings.

Druss 2009; Mangurian 2017



CRANIUM

CREATING A **CULTURE** CHANGE IN COMMUNITY MENTAL HEALTH CLINICS THROUGH HAVING A **REGISTRY**, **ADVICE** TO GET MEDICAL SCREENING, PEER **NAVIGATORS**, **INFORMATION** TECHNOLOGY, **UMBRELLA** OF SERVICES, AND INITIATING **MEDICATIONS**

Mangurian et al. Implementation Science (2017) 12:134
DOI 10.1186/s13012-017-0663-z

Implementation Science

METHODOLOGY Open Access

Utilization of the Behavior Change Wheel framework to develop a model to improve cardiometabolic screening for people with severe mental illness

Christina Mangurian[1,2*], Grace C. Niu[1], Dean Schillinger[2,3], John W. Newcomer[4], James Dilley[1] and Margaret A. Handley[2,3,5]

Understanding the Cost of a New Integrated Care Model to Serve CMHC Patients Who Have Serious Mental Illness

Christina Mangurian, M.D., M.A.S., Grace Niu, Ph.D., Dean Schillinger, M.D., John W. Newcomer, M.D., Todd Gilmer, Ph.D.

People with serious mental illness, such as schizophrenia and bipolar disorder, experience premature mortality, often from cardiovascular disease (CVD). Unfortunately, people with serious mental illness typically are not screened or treated for CVD risk factors despite national guideline recommendations. Access to primary preventive care in community mental health settings has the potential to reduce early mortality rates in this population. The authors review best practices for developing an integrated care model for people with serious mental illness by considering economic feasibility and sustainability from the perspective of a community mental health clinic (CMHC). A process-mapping approach was used to gather information on clinic costs (staff roles, responsibilities, time, and salary) of serving 544 patients at one CMHC. The estimated annual cost of the model was measurable and modest, at $74 per person, suggesting that this model may be financially feasible.

Psychiatric Services 2017; 68:990–993; doi: 10.1176/appi.ps.201700199

So what can you do to improve the experience for you and the patient?

Informed Consent and Shared Decision Making

- Approach these patients as you would any other, making sure to assess their capacity to provide informed consent.
  - Can you tell me, in your own words, what is the purpose of the study/procedure?
  - What are the potential risks of the study/procedure?
  - What are the potential benefits of the study/procedure?

- Use shared decision making approaches

Hickman 2011

Pragmatic Solutions for Providers

- Engage the patient's intensive case manager (ICM) if available
- Consider pre-medication
- Order additional STD testing (HIV, Chlamydia, Syphilis, HepC)
- HPV (<26)
  - Although optimal vaccination is 11, this may be an opportunity for us to prevent disease in this population

Hughes 2016; Janssen 2015

Implications

- These findings should influence policy to improve the care of people with SMI
  - Need to improve cervical care screening of people with SMI system-wide
  - Need to focus on young adults (opportunity for prevention!)
  - Need to bring primary GYN care to CMHCs

Thank you!

Please feel free to contact me with questions
(christina.mangurian@ucsf.edu)

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