

Women Rise: Empowering Women To Manage Pain

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BACKGROUND

- According to the United States Department of Health and Human Services (HHS) Office of Women's Health (OWH), women are more likely to experience chronic pain and use prescription opioid pain medications for longer periods and in higher doses than men.
- Sentara RMH Medical Center (SRMH) is a community hospital serving a seven-county area with a population of 218,000 residents via inpatient and outpatient services provided in rural and metropolitan areas.
- From July 1, 2016, through December 31, 2016, over 27% of women over 35 seen by the SRMH Medical Group had an active opioid prescription.
- Primary health care providers supplied 67% of the more than 23,000 prescriptions written from April 15, 2016, through December 31, 2016.
- Individuals reported that the Virginia Prescription Management Program (PMP) was very cumbersome to use due to the process of exiting the EMR, logging into the PMP and entering the patient's information, taking up to 1/3 of the time traditionally allotted to patients.



WOMEN RISE PROGRAM

Sentara Patients: Chronic Pain Self-Management Program (CPSMP)

- First, subjects may learn of CPSMP workshop dates from their prescribing providers, care managers, pharmacists, other Sentara RMH Medical Center (SRMH) staff, or project partners, if they feel attending a workshop would be beneficial to them.
- Second, flyers with CPSMP workshop dates and information will be posted in various locations across the service area (senior centers, community centers, medical clinics, pain clinics, newspapers).

Sentara Clinicians

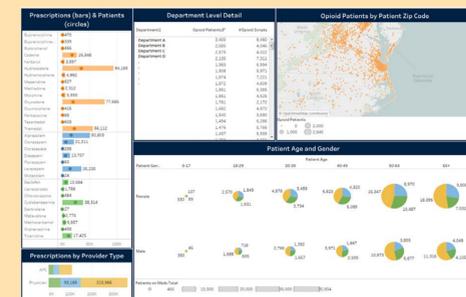
- Clinicians with prescriptive authority, including physicians, nurse practitioners, and physician assistants, completed required continuing education credit (CME) opportunities.
- Sentara IT created a link within the electronic medical record (EMR) that logs the prescribing provider directly into the PMP and auto-populates the patient's information.
- A best practice alert (BPA) was developed within the EMR to flag patients with Chronic pain (Other Chronic Pain)[G89.29] or Chronic, continuous use of opioids [F11.90] diagnoses.



METHODS

- Prospective and retrospective data collection for the purposes of program evaluation was conducted via the EMR and by self-reported questionnaires containing the RAS-DS items.
- The program and associated data collection was approved by the SRMH Institutional Review Board (IRB).

MEASURES



EMR Reports

- Opioid prescriptions for all SRMH patients
- Opioid prescriptions for women 35 and older
- Number of all patients seen by SRMH providers
- Number of all women 35 and older seen by SRMH providers

Figure 1. Tableau® visualization of opioid use of Sentara patients across Virginia

Recovery Assessment Scale - Domains and Stages (RAS-DS)

- Reliable (Cronbach's $\alpha = .96$) and valid tool

RESULTS

Self-reported RAS-DS Data

- Paired samples t-test revealed statistically significant improvement ($P < .05$) the total recovery score and on all RAS-DS subscales (See Figures 2 & 3).
- There was a statistically significant improvement in the overall recovery score ($t = -3.36, p = .004$) from pre ($M = 115.5$; $SD = 16.15$) to post ($M = 129.06$; $SD = 12.04$).
- The maximum total recovery score possible on the RAS-DS is 152.

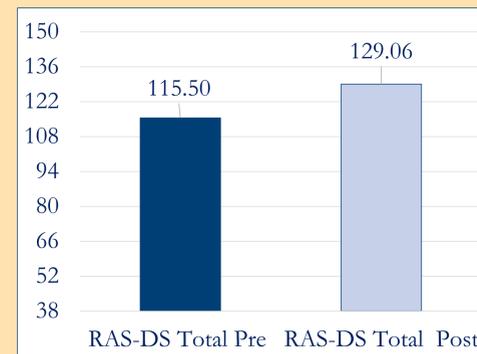


Figure 2. Paired-sampled t-test for RAS-DS

RESULTS CONTINUED

- There was significant increase from pre ($M = 3.41$; $SD = .40$) to post ($M = 3.68$; $SD = .27$) average scores on the Doing Thing I Value (DTIV) subscale ($t = -2.55, p = .021$).
- There was significant increase from pre ($M = 3.12$; $SD = .46$) to post ($M = 3.42$; $SD = .34$) average scores on the Looking Forward (LF) subscale ($t = -2.63, p = .018$).
- There was significant increase from pre ($M = 2.53$; $SD = .52$) to post ($M = 3.02$; $SD = .56$) average scores on the Mastering My Illness (MMI) subscale ($t = -3.56, p = .002$).
- There was significant increase from pre ($M = 3.24$; $SD = .61$) to post ($M = 3.63$; $SD = .31$) average scores on the Connecting and Belonging (C&B) subscale ($t = -2.96, p = .009$).

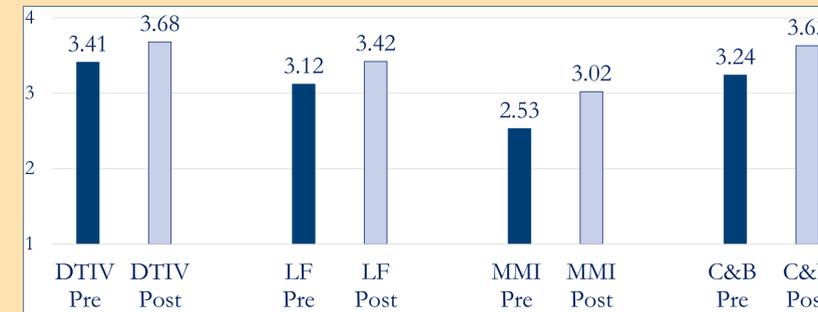


Figure 3. Paired-sampled t-test results for RAS-DS Subscales

Leveraging EMR Reports

- From Q1 2018 ($n = 5014$) to Q2 2019 ($n = 4485$) there has been a 10.55% reduction in the overall number of prescribed opioids.
- From Q1 2018 ($n = 2300$) to Q2 2019 ($n = 1701$) there was a 26.04% reduction in the overall number of prescribed opioids for SRMH primary care practices.
- Between 7/1/18 and 12/31/18 (Q3, Q4) there were 21,292 total women over the age of 35 seen by our providers. Out of them 5046 had an active opioids prescription which equals 23.70%. This is a statistically significant $\chi^2 = 76.91, p < .001$, decrease of 4.2% from the original data (27.52%) presented in our grant application for Q3 & Q4 2016.
- The combined decrease in proportion of women over 35 with opioid prescription between Q1&Q2 2018 [8323/30759 (27.1%)] vs. Q1&Q2 2019 [8392/34531 (24.3%)] is also statistically significant $\chi^2 = 38.38, p < .001$ (see Table 1 for breakdown by quarter).

RESULTS CONTINUED

	Q1 2018	Q1 2019	Q2 2018	Q2 2019
Women w/ an active opioids prescription	4109 (27.1%)	4216 (24.7%)	4214 (27.0%)	4176 (23.9%)
Women w/o an active opioids prescription	11053 (72.9%)	12521 (75.3%)	11383 (73.0%)	13318 (76.1%)
Total women seen by SRMH	15162 (100%)	17037 (100%)	15597 (100%)	17494 (100%)
	$\chi^2 = 13.65, p < .001$		$\chi^2 = 25.66, p < .001$	

Table 1. Pearson chi-square test of significance of proportion differences in opioid prescription counts.

DISCUSSION & BEST PRACTICE RECCOMENDATION

- The preliminary results of this program evaluation show that the intervention within CPSMP is making statistically significant, and more importantly, clinically meaningful, improvement in clinical and patient self-reported outcomes.
- There was a decrease in the overall number of opioids, and more importantly, in the number of opioids prescribed to women 35 and older seen by SRMH providers.
- Sentara Healthcare IT has streamlined provider access to Virginia and North Carolina's PMP. This significantly increases the prescribing provider's ability to provide high quality care to all our patients and saves a significant amount of time.
- The opioid BPA in the EMR triggers if providers use the following diagnoses: Chronic pain or Chronic, continuous use of opioids.
- The opioid BPA also provides tools including links to the VA and NC state Prescription Monitoring sites, a MEDD (Morphine Equivalent Daily Dose) calculator, a link to the Discussion Points and Controlled Substance Agreement (which both physician and patient need to sign), Naloxone (Narcan) orders and patient instructions, and Urine Drug Screen orders.
- Future evaluation will continue to assess if the activities of the Women Rise program continue to aid participants in living healthier lives with less pain and preventing opioid misuse.

REFERENCES

- References available upon request

CONTACT

- Please contact Olivia Haimani with any questions at ofhaiman@sentara.com