

leading to increased monitoring. Although many guidelines exclude treatment of palliative patients, it remains important to evaluate all patients receiving opioids for substance misuse to ensure safety.

**Research Objectives.** The primary objective was to determine if current opioid prescribing regulations are perceived by adult cancer patients as a barrier to adequate pain management.

**Methods.** Following a review of the literature and discussion with palliative experts, we identified potential concerns for patients with prescribing guidelines and developed a 21-item survey. We used a convenience sample of patients receiving opioids in the University of Virginia Palliative Care clinic during the period from February to April 2018. We used chi-square and t-tests to evaluate the correlation between patient perceptions that regulations made pain management difficult and demographic variables, pain and physical function scores, and the opioid risk tool (ORT).

**Results.** Ninety patients completed the survey. The majority (88.9%) were aware of opioid prescribing laws and 83.2% agreed that opioid abuse is a problem. One-third reported increased regulations made it difficult to manage pain (37.1%) or that insurance issues were a barrier to getting pain medications (32.6%). 38.9% of patients reported their doctor is less likely to prescribe strong pain medications due to the opioid crisis and 24% stated family or friends have told them not to take opiates. In univariate analyses, patients with higher ORT scores ( $p=0.025$ ) and those with higher pain scores ( $p=0.0058$ ) were more likely to report difficulty obtaining pain medications due to prescribing regulations.

**Conclusion.** This initial survey suggests many palliative care patients feel the increase in opioid prescribing regulations is a barrier to adequate pain management.

**Implications for Research, Policy, or Practice.** Further research is needed to explore the impact of the current opioid crisis and prescribing regulations on patients receiving adequate pain management.

### *What's the Risk? Naloxone Co-Prescribing in an Outpatient Palliative Care Clinic (FR440C)*



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#### *Objectives*

- List the three most prevalent risk factors for opioid-induced respiratory depression in patients receiving palliative care.
- Discuss the potential benefits and burdens of naloxone co-prescribing in palliative care.

**Original Research Background.** Centers for Disease Control and Prevention (CDC) guidelines on opioid prescribing for chronic pain recommend co-prescribing naloxone for patients with risk factors for Overdose or Serious Opioid-induced Respiratory Depression (OSORD). While palliative care is excluded from this guideline overall, many patients receiving palliative care need chronic opioid therapy; prevalence of OSORD risk factors in this population is unexplored.

**Research Objectives.** This study aims to 1) describe prevalence and patterns of risk factors for OSORD among ambulatory palliative care patients at an academic medical center and 2) identify frequency of naloxone co-prescribing in a pilot initiative using an integrative risk tool, the Risk Index for OSORD (RIOSORD).

**Methods.** Patients taking opioids and followed in outpatient palliative care in March–June 2017 were included in this retrospective chart review. Demographics, published risk factors for OSORD, RIOSORD score, and naloxone prescription were extracted. RIOSORD score  $\geq 18$  was designated as indication for naloxone co-prescription. Descriptive statistics were used to evaluate data.

**Results.** Risk factors of note among 91 included patients were prescription of ER/LA opioid formulation(s) (54.9%), benzodiazepine(s) (29.7%), MEDD  $> 100$  mg (49.5%), and MEDD  $> 50$  mg (74.7%). Sixty-one patients (67.0%) had an indication for naloxone, and 28 of these patients (45.9%) were co-prescribed naloxone. Naloxone may have been appropriate for an additional 18 patients if single AMA or CDC recommendations were applied. Twenty-one patients had RIOSORD scores in the highest risk class. Sixty-seven percent of patients had active cancer; 14% were in survivorship.

**Conclusion.** Patients receiving palliative care have similar risk factors for OSORD versus patients without serious illness and may benefit from naloxone co-prescription, when consistent with their goals of care.

**Implications for Research, Policy, or Practice.** An integrative risk tool may be useful to stratify patients for naloxone co-prescribing. Future studies should determine the most predictive risk factors of OSORD and the impact of naloxone co-prescribing on quality of life in this population.

### *Impact of Parenteral Opioid Shortage on Opioid Prescriptions Among Patients Seen by the Palliative Care Team of a Comprehensive Cancer Center (FR440D)*



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#### Objectives

- Measure the impact of parenteral opioid shortage on the opioid prescriptions by the inpatient palliative care (PC).
- Compare the pain control of patients before and after parenteral opioid shortage (POS).

**Original Research Background.** Recent POS has the potential to impact cancer pain management in hospitalized patients.

**Research Objectives.** This study aims to compare changes in the opioid prescriptions by the inpatient PC team before and after the institution first reported the POS.

**Methods.** We reviewed and compared the electronic health records of 386 consecutive eligible consultations seen by the inpatient PC team equally in 1 month before and after the announcement of POS on February 8, 2018. The eligibility criteria include (1) cancer diagnosis, (2)  $\geq 18$  years of age, (3) taking opioid medication at the time of consultation, and (4) having at least two consecutive visits with the PC team. Patient demographics, cancer type, opioid type, route, and dose defined as the morphine equivalent daily dose were assessed. Pain control was assessed based on the documentation for each follow-up by the PC team.

**Results.** After POS, parenteral opioids (patient-controlled analgesia, and intravenous breakthrough) were less used by the referring oncology teams [before POS 109/311 (35%) vs. after POS 56/311 (18%) ( $P < .001$ )], while non-parenteral opioids (extended release, transdermal, and oral breakthrough) were more used [before POS 202/311 (65%) vs. after POS 258/311 (82%)  $P < .001$ ]. Similar changes associated with POS were indicated by the PC team [parenteral opioids 159/338 (47%) vs. 96/338 (29%) ( $P < .001$ ); non-parenteral opioids 179/338 (53%) and 240/228 (71%)]. At first PC follow-up, significantly less proportion of patients achieved better pain control after POS [119/193 (62%) vs. 144/193 (75%) ( $P = .006$ )]. However, at the second PC

follow-up, the proportion of pain improvement was similar in both cohorts.

**Conclusion.** There is a significant change in opioid routes associated with POS. POS was associated with worse analgesia.

**Implications for Research, Policy, or Practice.** More research is needed to better understand the impact of POS.

#### *Family Caregiver Practices to Support Self-Management Among Adults with Serious, Chronic Illness (FR441A)*



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#### Objectives

- Identify at least three practices of family caregivers to support patient self-management of serious, chronic illness.
- Identify at least three factors that may help or hinder family caregivers in supporting patient self-management.
- Describe how data inform self- and family management of serious, chronic illness.

**Original Research Background.** Self-management refers to the daily activities of patients and their family caregivers to co-manage illness. While family caregivers have an integral role in self-management, what they actually do in this role remains unclear.

**Research Objectives.** We sought to identify family caregivers' practices to support patients' self-management of serious, chronic illness, including facilitators and barriers.

**Methods.** For this qualitative metasynthesis of published research containing family caregivers' reports of their experiences supporting patient self-management of serious, chronic illness, we searched Ovid-MEDLINE, OVIDPscINFO, OvidEMBASE, and CINAHL databases. After reviewing articles for eligibility and using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards for reporting, we extracted practices, facilitators, and barriers from each article and coded them. We then categorized similar practices, facilitators, and barriers.