



## Introduction

- A common manifestation of chronic opioid use, OIC is associated with a range of symptoms (e.g., abdominal pain, cramping, bloating, hard stools, straining, painful defecation, and an ongoing sense of incomplete evacuation) that adversely affect quality of life and the ability to perform activities of daily living<sup>1-3</sup>
- Opioid utility for treating chronic pain can be diminished; patients with OIC may increase utilization of healthcare resources due to often switching pain management therapies or discontinuing treatment<sup>2,3</sup>
- An OIC patient survey was conducted with objectives of:
  - Exploring aspects of the prescriber-patient relationship as it relates to opioids and related side effects
  - Understanding the severity of the side effects of opioid therapy, especially OIC
  - Determining the effectiveness of current non-prescription and prescription treatments for OIC
  - Gauging knowledge about prescription treatments for OIC

## Methods

- An online survey of adult (≥25 years) chronic pain sufferers treated with an opioid with OIC was conducted between November 17-20, 2014
- Respondents were required to indicate that they were:
  - Currently taking an opioid analgesic
  - Moderately bothered by constipation, as self-reported as a score of ≥3 on a 5-point Likert scale, where a score of 5 indicated constipation "has bothered me greatly"
  - Experiencing worsening gastrointestinal symptoms since initiating opioid therapy, if they experienced constipation before beginning opioid therapy
- Open- and closed-ended questions were designed to provide qualitative and quantitative results

## Results

- A total of 105 valid responses were collected
  - Valid responses were those that completed the entire survey and were not identified as speeders or straight-liners (respondents that did not pay attention to the survey questions)
- Table 1** depicts survey demographics
  - Predominantly male, Caucasian, middle-aged or elderly
- Clinician-Patient Relationship**
  - Opioids were typically prescribed by a primary care provider (51%) or a pain specialist (30%) and most patients (59%) had been on pain therapy for longer than 24 months (**Table 2**)
  - Opioids were prescribed mostly to long-term patients, though almost 1 in 5 prescriptions were given on the first visit
- Most prescribers were aware of their patients' constipation (**Figure 1**)
  - 83% of patients initiated a conversation about constipation with their physician
  - 16% of physicians and only 1% of physician assistants initiated the conversation with patients
  - Patients felt a pamphlet about OIC (58%) or a constipation symptom checklist (56%) would help them to initiate a discussion about OIC or constipation with their physician
- 17% of patients did not discuss their constipation with their physician
  - 67% of patients did not discuss this symptom as they did not feel it was important enough
  - 33% were embarrassed to discuss their constipation
  - 17% indicated that their physician did not ask
  - 11% did not want to appear to be complaining
- Approximately 30% of respondents were unaware of the risk of constipation when they started treatment (**Figure 2**)
  - Among those aware, the prescriber was the most common source of information (55%)

### Severity and Impact of Symptoms

- The severity of constipation is worst 6-12 months into opioid treatment (**Table 3**)
  - 26% of respondents did not mind their level of constipation
  - 56% were satisfied with the treatment options available for constipation
- Half of respondents report OIC has a significant impact on mood and activities
  - 30% missed work or at least one activity in the previous month due to OIC
  - One-third had made changes to their opioid therapy (**Figure 3**)

### Non-Prescription and Prescription Treatments

- Prescribers most commonly recommend increasing fluid intake and stool softeners (59% each) for patients (**Figure 4**)
  - Exercise is adopted least frequently
- For prevention of OIC, non-prescription stimulant and osmotic laxatives were identified as most effective
  - 56% of patients reported stimulant laxatives work well; 22% indicate they provide some relief
  - 50% of patients reported osmotic laxatives work well; 33% indicate they provide some relief
- For treatment of OIC, all non-prescription treatments were considered similarly effective
  - Approximately 45% reported that stimulant/osmotic laxatives and stool softeners each work well
- There is room for improvement (**Figure 5**)
  - Only 19% of patients were very satisfied with their non-prescription treatment for OIC and 25% were dissatisfied

### Awareness of specific prescription medications is low (**Figure 6**)

- Two-thirds were not aware of any specific medication and 90% have not been prescribed any of the medications listed in **Figure 6**
- Approximately 80% of survey respondents reported they would be willing to take a prescription medication

**Table 1. Demographics**

Characteristic	Number of Respondents (%) (N=105)
Male	60 (57%)
<b>Ethnicity</b>	
Caucasian	100 (95%)
African American	3 (3%)
Other	2 (2%)
<b>Age range</b>	
33-48 years	11 (10.5%)
49-55 years	21 (20%)
56-60 years	24 (22.9%)
61-75 years	29 (27.6%)
<33 or >75 years	20 (19%)
<b>Geographic distribution</b>	
North	9 (9%)
South	30 (29%)
Midwest	33 (33%)
West	25 (21.4%)
Outside United States	8 (7.6%)
<b>Employment status</b>	
Unable to work/disabled	33 (30%)
Retired	29 (28%)
Full time	22 (21%)
Self employed	9 (9%)
Stay at home	7 (7%)
Part time	4 (4%)
Other	1 (1%)

**Table 2. Opioid history**

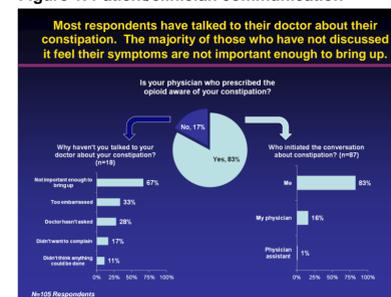
Parameter	Number of Respondents (%) (N=105)
<b>Opioid prescriber</b>	
Primary care provider	54 (51%)
Pain specialist	32 (30%)
Orthopedic doctor	7 (7%)
Rheumatologist	5 (5%)
Another specialist	5 (5%)
MD at walk-in clinic or urgent care	1(1%)
Oncologist	1(1%)
<b>Duration of current opioid therapy</b>	
<6 months	14 (13%)
6-12 months	15 (14%)
12-24 months	14 (13%)
>24 months	62 (59%)

**Table 3. Severity and impact of OIC**

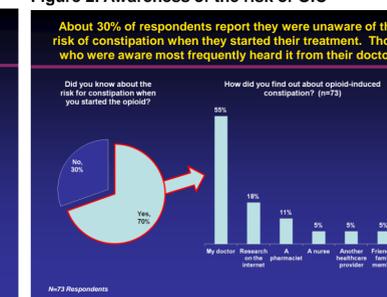
Parameter	Number of Respondents (%) (N=105)
<b>Severity level of constipation* by duration of opioid therapy</b>	
<6 months	8 (57%)
6-12 months	13 (86%)
12-24 months	9 (65%)
>24 months	38 (61%)
<b>Satisfied with treatment options for constipation</b>	
Agree completely	13 (12%)
Somewhat agree	46 (44%)
Totally agree	9 (9%)
<b>Don't mind current level of constipation</b>	
Agree completely	5 (5%)
Somewhat agree	22 (21%)
Totally disagree	29 (28%)

\*Rating of 4 or 5-point scale

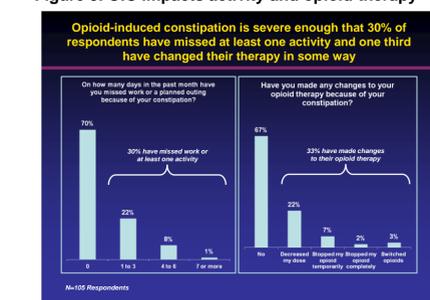
**Figure 1. Patient/clinician communication**



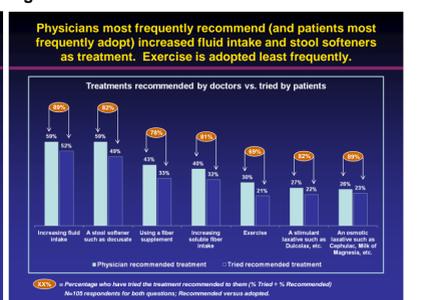
**Figure 2. Awareness of the risk of OIC**



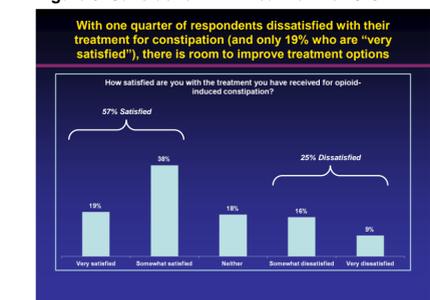
**Figure 3. OIC impacts activity and opioid therapy**



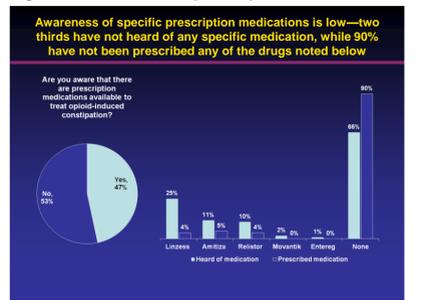
**Figure 4. Treatment recommendations vs. actual use**



**Figure 5. Satisfaction with treatment for OIC**



**Figure 6. Awareness of prescription medication**



## Conclusions

- Results of this survey suggest that patients with OIC have substantial unmet needs with regard to education on this adverse effect, communication with their opioid prescriber, and understanding of the availability and role of medications for prevention and treatment
- OIC is associated with a substantial clinical burden and has an adverse impact on patient quality of life
- Conventional approaches do not adequately address symptoms and many are dissatisfied with currently available treatments for OIC
- Although most patients are not aware of prescription medications, the large majority of patients are willing to try such therapies
- Patients may benefit from having access to educational aids, including pamphlets or symptom checklists, in order to discuss constipation and/or OIC with their healthcare providers

## References

- Kalso E, Edwards JE, Moore A, et al. Opioids in chronic non-cancer pain: systematic review of efficacy and safety. *Pain*. 2004;112:372-380.
- Bell TJ, Panchal SJ, Miaszkowski C, et al. The prevalence, severity, and impact of opioid-induced bowel dysfunction: results of a US and European Patient Survey (PROBE) 1. *Pain Med*. 2009;10:35-42.
- Coyne KS, LoCasale RJ, Datto CJ, Sexton CC, et al. Opioid-induced constipation in patients with chronic noncancer pain in the USA, Canada, Germany and the UK: descriptive analysis of baseline patient-reported outcomes and retrospective chart review. *ClinicoEcon Outcomes Res*. 2014;6:269-281.