Overview of opioid abuse as a societal problem

- Jones\(^1\) compared data from National Survey on Drug Use and Health

<table>
<thead>
<tr>
<th></th>
<th>Data from 2002-2004</th>
<th>Data from 2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>People using heroin</td>
<td>379,000</td>
<td>588,000</td>
</tr>
<tr>
<td>Used opioids before heroin</td>
<td>66.8%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Used heroin before opioids</td>
<td>16.4%</td>
<td>9.7%</td>
</tr>
<tr>
<td>People who used opioids nearly every day (100-365 days) and reported using opioids before heroin</td>
<td>64.1%</td>
<td>83.6%</td>
</tr>
</tbody>
</table>

- Church et al\(^2\) found that of patients with newly diagnosed hepatitis C in Massachusetts, 95% used opioids before heroin
- Stanley et al\(^3\) found that of patients with newly diagnosed hepatitis C in Wisconsin, 37.5% started by injecting opioids before moving on to heroin or methamphetamine

Orthopaedics surgeons’ contribution to the problem

- Based on 2009 prescription data\(^4\), we were the 3\(^{rd}\) top opioid prescribing specialty amongst medical doctors (4\(^{th}\) if you include dentists)
  - PCP wrote 28.8% of opioid prescriptions
  - Internists 14.6%
  - Dentists 8.0%
  - Orthopaedic Surgeons 7.7% (6.1 million prescriptions)
- Based on 2013 Medicare data\(^5\), we were 5\(^{th}\) (behind Family Medicine, Internal Medicine, Nurse Practitioners, Physician Assistants---but it’s unclear what specialties the NPs and PAs are affiliated with)

Musculoskeletal injuries and pain management across cultures

- USA patients have more pain than expected from injury and from surgery\(^6\)
  - >50% of USA patients felt as though there was something else responsible for their pain (they listed infection, missed injury, implant failure, inappropriate medical care as possible reasons for pain)
- USA patients consume more narcotics after musculoskeletal injuries than patients in other countries\(^6,7\)
And patients in other countries rate their pain as less severe and are satisfied with their pain management regimen (ie they are not suffering with miserable pain and being denied medications)\(^8\)

Prescribing patterns

- Upper extremity surgery patients prescribed average 30 opioid pills after surgery, but took average 10 pills\(^9\)
  - 77% patients took < 15 pills, 45% patients took < 5 pills
  - We can decrease the number of pills prescribed (from 30 → 15)
- Lower extremity surgery patients prescribed average 47 opioid pills after surgery, but took an average of 21 pills\(^10\)
  - No difference in consumption between bony and non-bony procedures or between anatomic regions of surgery (forefoot vs midfoot vs hindfoot/ankle)
  - 63% patients with leftover medication are willing to return it to DEA disposal site
  - We should educate patients on nearby disposal sites
  - Website: https://apps.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e1s1

- Other surgical subspecialty literature
  - Wide variety in amount of opioids prescribed by 32 different providers for the same procedure\(^11\)
  - >20% surgeons overprescribe\(^12\)
  - After routine urology procedures\(^13\):
    - 58% of pills dispensed were consumed
    - 12% of patients requested refills
• 67% of patients had leftover medication from initial prescription
• Of those with leftovers, 91% kept them, 6% threw in trash, 2% down the toilet, <1% returned to pharmacy

Conclusion: we are part of the problem. What can we do?
• Be aware of risk factors amongst our patients (screening tools)
• Pre-operative conversation setting expectations VERY IMPORTANT
• Self efficacy and coping strategies are KEY
• NSAIDs vs opioids—lesser of two evils?
• Clinic guidelines/protocols are helpful

• CDC and AAOS are great resources

Recommended Reading List
On Opioids:

On NSAIDs:

10 Merrill H, Dean D, Mottla J, Neufeld S, Cuttica D, Buchanan M. Opioid Consumption Following Foot and Ankle Surgery. Manuscript in Preparation