



Shared Decision Making Decision Tool to Reduce Opioid Prescriptions in the Emergency Department

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Background – Opioid Crisis

- ▶ US opioid misuse crisis
 - ▶ 19,000 overdose deaths in 2014 (more than motor vehicle crashes)¹
- ▶ Diversion of prescription opioids
 - ▶ Prescription increased 153% from 2004 to 2011²
- ▶ Addiction often starts with legitimate use by opioid-naïve population
 - ▶ 8% prescribed for short-stay surgery still taking opioids 1 year later³

1. Califf RM, Woodcock J, Ostroff S. A Proactive Response to Prescription Opioid Abuse. N Engl J Med. 2016. doi:10.1056/NEJMSr1601307.

2. Substance Abuse and Mental Health Services Administration. The DAWN Report: Highlights of the 2011 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visit. Rockville, MD; 2013.

3. Asim A, Gomes T, Zheng H, Mamdani MM., Juurlink DN., Bell CM. Long-term Analgesic Use After Low-Risk Surgery; A Retrospective Cohort Study. Arch Intern Med. 2012;172(5):425-430. doi:10.1001/archinternmed.2011.1827.

Shared Decision Making

- ▶ New paradigm - engage both patients and providers
- ▶ Explain benefits & risks to reach a joint decision
- ▶ Problems:
 - ▶ hard to implement
 - ▶ time constraints

Decision Making Tool

- ▶ Literature based
- ▶ Facilitate shared decision making
- ▶ Highlight tradeoffs/risks of opioids vs non opioid options

Which Option below is Most Important to Me? *(check 1 category)*

Version 1

Options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	My Choice
	Pain Relief	Cost	Side Effects	Risk of Dependency	Resume Reg. Activities	
Advil, Aleve, Motrin ibuprofen, naproxen, NSAIDs	+++	\$	Upset stomach Bleeding Risk of kidney damage	None	Small Benefit	<input type="checkbox"/>
Percocet, Vicodin opioids	+++	\$\$	Sleepiness Nausea & vomiting Constipation	12 out of 100 people (12%)	Delayed	<input type="checkbox"/>
Tylenol acetaminophen	++	\$	None	None	No evidence	<input type="checkbox"/>
Muscle relaxants e.g. Valium, Flexeril	++	\$\$	Sleepiness	1 out of 100 people (1%)	No evidence	<input type="checkbox"/>
Gel or Cream e.g. Capsaicin, Lidocaine	++	\$\$	Skin irritation or burning	None	No evidence	<input type="checkbox"/>
Physical Therapies e.g., Heating pads, exercise	++	\$-\$\$\$	Injury	None	Small Benefit	<input type="checkbox"/>

Methods

- ▶ **Iterative studies** to improve usability
 - ▶ team of 2, used low tech printout
 - ▶ qualitative interview of providers (MD, NP, RN) & patients (MSK Pain only)
- ▶ Locations
 - ▶ HUP: Fast track ED, Main ED
 - ▶ Presbyterian: Trauma bay, Main ED

Which Column below is Most Important to Me? (check 1 category)

Options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	My Choice
	Pain Relief	Risk of Addiction	Side Effects	Cost	Time to Return to Work	
Advil, Aleve, Motrin ibuprofen, naproxen, NSAIDs	+++	None	Upset stomach Bleeding Risk of kidney damage	\$	Quicker	<input type="checkbox"/>
Percocet, Vicodin opioids	+++	12 out of 100 people (12%)	Sleepiness Nausea & vomiting Constipation	\$\$	Delayed	<input type="checkbox"/>
Tylenol acetaminophen	++	None	None	\$	Not enough data	<input type="checkbox"/>
Muscle relaxants e.g. Valium, Flexeril	++	1 out of 100 people (1%)	Sleepiness	\$\$	Not enough data	<input type="checkbox"/>
Gel or Cream e.g. Capsaicin, Lidocaine	++	None	Skin irritation or burning	\$\$	Not enough data	<input type="checkbox"/>
Physical Therapies e.g., Heating pads, exercise	++	None	Injury	\$-\$\$\$	Quicker	<input type="checkbox"/>

Version 3

Which Column below is Most Important to Me? (check 1 category)

Options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preference
	Pain Relief	Risk of Addiction	Side Effects	Cost	Time to Return to Work	
Advil, Aleve, Motrin ibuprofen, naproxen, NSAIDs	+++	None	Upset stomach Bleeding Risk of kidney damage	\$	Quicker	<input type="checkbox"/>
Percocet, Vicodin opioids	+++	12 out of 100 people (12%)	Sleepiness Nausea & vomiting Constipation	\$\$	Delayed	<input type="checkbox"/>
Tylenol acetaminophen	++	None	None	\$	Not enough data	<input type="checkbox"/>
Muscle relaxants e.g. Valium, Flexeril	++	1 out of 100 people (1%)	Sleepiness	\$\$	Not enough data	<input type="checkbox"/>
Gel or Cream e.g. Capsaicin, Lidocaine	++	None	Skin irritation	\$\$	Not enough data	<input type="checkbox"/>
Physical Therapies e.g., Heating pads, exercise	++	None	Injury	\$-\$\$\$\$	Quicker	<input type="checkbox"/>

Major Themes

Providers

- ▶ Resistance to change
- ▶ Time constraints
- ▶ Skepticism about shared decision making

Patients

- ▶ Varying levels of health literacy (symbols vs words)
- ▶ Liked idea of having more say
- ▶ Nudge but not coerce

Overall Thoughts

- ▶ Theory doesn't always translate perfectly
- ▶ Gap of understanding still exist between providers and patients
- ▶ Shared decision making has potential to bridge gap but must be implemented properly

Future Direction

- ▶ Randomized control trial to test decision tool in EDs
- ▶ Adapt tool to dental surgical setting
 - ▶ Unique challenges
 - ▶ Perspective Article in *Journal of Oral and Maxillofacial Surgery*
 - ▶ With Dr. Elliot Hersh & Dr. Neeraj Panchal

Lessons Learned

- ▶ Interact professionally with providers and patients
- ▶ Navigate IRB process
- ▶ Understand more about grant writing process and planning large clinical studies