THE FUTURE OF OPIOIDS:
A ROAD MAP FOR APPROPRIATE USE

Charles MacLean, MD
Connie Van Eeghen, DrEd
Mark E. Pasanen, MD
Mayo Fujii, MD
Amanda Kennedy, PharmD

University of Vermont College of Medicine

Updated November 2016
Office of Primary Care and Area Health Education Centers (AHEC) Program

Connecting students to careers, professionals to communities, and communities to better health

The Robert Larner, M.D. College of Medicine at the University of Vermont AHEC Program is a statewide network of community and academic partners working together through three regional AHECs and a Program Office at UVM to improve the health of Vermonters.

Education and Career Awareness
We believe the success in healthcare innovation, transformation, and reform depends on an adequate supply and distribution of well-trained healthcare professionals.

Recruitment
AHEC brings educational and quality improvement programming to Vermont's primary care practices and supports community-based health education across the state.

Retention
Our efforts focus on achieving a well-trained healthcare workforce so that all Vermonters have access to quality care, including those who live in Vermont's most rural areas and Vermont's underserved populations.

Announcements
Geriatrics Conference
April 5, 2017
Capitol Plaza, Montpelier, VT

What's New?

Primarily Vermont Summer 2016 Issue (PDF)
Primarily Vermont Spring 2016 Issue (PDF)
Objectives

- Scope of the opioid problem
- Best practice prescribing principles for acute and chronic pain
- Population and panel management data
  - Electronic medical record
  - Prescription Drug Monitoring Program (VMPS)
- QI with Vermont practices
  - Medical & Dental
- Post operative prescribing
Background

The scope of the problem
Opioid prescribing in the US

- Increase in opioid prescribing in past 15 yr
- Overdose deaths tripled between 1999-2008

MMWR Nov 2011
MMWR Jan 2016
As many as 1/4 people who receive prescription opioids long term for non-cancer pain in primary care settings struggle with addiction.

1/20 people in the US report using prescription opioids for nonmedical reasons.

Source of misused prescription opioids:
- 71% of prescription opioids are obtained from a family member or friend (given, bought, or stolen)
  - Most of these opioids are from a single prescriber source and not from doctor shopping

National Survey on Drug Use and Health, 2011
Prescription misuse affects the young

Non-medical use of prescription pain relievers
% people reporting non-medical use, 2011 & 2012

- Vermont
- Northeast
- U.S.

- 12-17 Year Olds: 6% (Vermont), 5% (Northeast), 6% (U.S.)
- 18-25 Year Olds: 12% (Vermont), 9% (Northeast), 10% (U.S.)
- 26+ Years Old: 3% (Vermont), 3% (Northeast), 4% (U.S.)

Substance Abuse & Mental Health Services Administration/National Survey on Drug Use & Health (NSDUH) 2012
Vermont Deaths

Total number of accidental and undetermined manner drug-related fatalities involving an opioid (categories not mutually exclusive)

- Total opioid
- Rx opioid
- Heroin
- Fentanyl

Downstream health concerns

- Infection
  - Heart valve
  - Blood stream
  - Skin and muscle
  - Bone
- Hepatitis C and HIV
- Lung damage
- Trauma
- Neonatal abstinence syndrome
- Falls & fractures
- Withdrawal symptoms
- Use of other alcohol or drugs
- Estimated $72.5 billion annual health care costs in the US
Downstream societal costs

- Job Loss
- Family Disruption
- Criminal Activity
- Incarceration
- Effects on children
- Social Stigma
- Loss of housing
- Loss of custody of children
Best practice prescribing

Finding solutions for the *Upstream* problem
Conflicting pressures influencing opioid prescribing

- **Factors increasing opioid prescribing**
  - Pressures to recognize and treat pain
  - Patient expectations regarding pain control
  - Pharmaceutical marketing to prescribers
  - Direct to consumer marketing

- **Factors moderating opioid prescribing**
  - Regulatory pressures to control overuse
    - Standards from licensing bodies & legislation
    - Prescription Drug Monitoring Programs (PDMPs)
  - Recognition of the epidemic of drug abuse
  - Insights from the overwhelmed criminal justice system
Recommendations for Prescribing Opioids for Chronic Pain Outside of Active Cancer, Palliative, and End-of-Life Care

CDC guidelines 2016 (condensed)

- Use alternatives to opioids whenever possible
- Explain the risks and benefits
  - Informed consent
- Focus on function
- Start low and go slow
- Track progress carefully
  - Surveillance for misuse
- Avoid benzodiazepines
Checklist for prescribing opioids for chronic pain

For primary care providers treating adults (18+) with chronic pain ≥3 months, excluding cancer, palliative, and end-of-life care

**CHECKLIST**

**When CONSIDERING long-term opioid therapy**
- Set realistic goals for pain and function based on diagnosis (e.g., walk around the block).
- Check that non-opioid therapies tried and optimized.
- Discuss benefits and risks (e.g., addiction, overdose) with patient.
- Evaluate risk of harm or misuse.
  - Discuss risk factors with patient.
  - Check prescription drug monitoring program (PDMP) data.
  - Check urine drug screen.
- Set criteria for stopping or continuing opioids.
- Assess baseline pain and function (e.g., PEG scale).
- Schedule initial reassessment within 1–4 weeks.
- Prescribe short-acting opioids using lowest dosage on product labeling; match duration to scheduled reassessment.

**If RENEWING without patient visit**
- Check that return visit is scheduled ≤3 months from last visit.

**When REASSESSING at return visit**
Continue opioids only after confirming clinically meaningful improvements in pain and function without significant risks or harm.
- Assess pain and function (e.g., PEG); compare results to baseline.
- Evaluate risk of harm or misuse.
  - Observe patient for signs of over-sedation or overdose risk.
  - If yes: Taper dose.
  - Check PDMP.
  - Check for opioid use disorder if indicated (e.g., difficulty controlling use).
    - If yes: Refer for treatment.
- Check that non-opioid therapies optimized.
- Determine whether to continue, adjust, taper, or stop opioids.
- Calculate opioid dosage morphine milligram equivalent (MME).
  - If ≥50 MME/day total (≥50 mg hydrocodone; ≥33 mg oxycodone), increase frequency of follow-up; consider offering naloxone.
  - Avoid ≥90 MME/day total (≥90 mg hydrocodone; ≥60 mg oxycodone), or carefully justify; consider specialist referral.
- Schedule reassessment at regular intervals (≤3 months).

**REFERENCE**

**EVIDENCE ABOUT OPIOID THERAPY**
- Benefits of long-term opioid therapy for chronic pain not well supported by evidence.
- Short-term benefits small to moderate for pain inconsistent for function.
- Insufficient evidence for long-term benefits in low back pain, headache, and fibromyalgia.

**NON-OPIOID THERAPIES**
Use alone or combined with opioids, as indicated:
- Non-opioid medications (e.g., NSAIDs, TCAs, SNRIs, anti-inflammatories).
- Physical treatments (e.g., exercise therapy, weight loss).
- Behavioral treatment (e.g., CBT).
- Procedures (e.g., intra-articular corticosteroids).

**EVALUATING RISK OF HARM OR MISUSE**
Know risk factors:
- Illegal drug use; prescription drug use for nonmedicinal reasons.
- History of substance use disorder or overdose.
- Mental health conditions (e.g., depression, anxiety).
- Sleep-disordered breathing.
- Concurrent benzodiazepine use.

**Urinary drug testing**
Check to confirm presence of prescribed substances and for undisclosed prescription drug or illicit substance use.

**Prescription drug monitoring program (PDMP)**
Check for opioids or benzodiazepines from other sources.

**ASSESSING PAIN & FUNCTION USING PEG SCALE**
PEG score = average of 3 individual question scores (30% improvement from baseline is clinically meaningful)

**Q1:** What number from 0–10 best describes your pain in the past week?
0 = “no pain”, 10 = “worst you can imagine”

**Q2:** What number from 0–10 describes how the past week, pain has interfered with your ENJOYMENT OF LIFE?
0 = “not at all”, 10 = “complete interference”

**Q3:** What number from 0–10 describes how the past week, pain has interfered with your GENERAL ACTIVITY?
0 = “not at all”, 10 = “complete interference”

**PRESCRIBING OPIOIDS FOR CHRONIC PAIN**

ADAPTED FROM CDC GUIDELINE

Opioids can provide short-term benefits for moderate to severe pain. Scientific evidence is lacking for the benefits to treat chronic pain.

**IN GENERAL, DO NOT PRESCRIBE OPIOIDS AS THE FIRST-LINE TREATMENT FOR CHRONIC PAIN** (for adults 18+ with chronic pain >3 months excluding active cancer, palliative, or end-of-life care).

**BEFORE PRESCRIBING**

**ASSESS PAIN & FUNCTION**
Use a validated pain scale. Example: PEG scale where the score = average of 3 individual question scores (30% improvement from baseline is clinically meaningful).

**Q1:** What number from 0–10 best describes your pain in the past week?
0 = “no pain”, 10 = “worst you can imagine”

**Q2:** What number from 0–10 describes how, during the past week, pain has interfered with your ENJOYMENT OF LIFE?
0 = “not at all”, 10 = “complete interference”

**Q3:** What number from 0–10 describes how, during the past week, pain has interfered with your GENERAL ACTIVITY?
0 = “not at all”, 10 = “complete interference”

**CONSIDER IF NON-OPIOID THERAPIES ARE APPROPRIATE**
- Such as: NSAIDs, TCAs, SNRIs, anti-inflammatories, exercise or physical therapy, cognitive behavioral therapy.

**TALK TO PATIENTS ABOUT TREATMENT PLAN**
- Set realistic goals for pain and function based on diagnosis.
- Discuss benefits, side effects, and risks (e.g., addiction, overdose).
- Set criteria for stopping or continuing opioid. Set criteria for regular progress assessment.
- Check patient understanding about treatment plan.

**EVALUATE RISK OF HARM OR MISUSE. CHECK:**
- Urine drug screen to confirm presence of prescribed substances and for undisclosed prescription drug or illicit substance use.
- Medication interactions. AVOID CONCURRENT OPIOID AND BENZODIAZEPINE USE WHENEVER POSSIBLE.

**WHEN YOU PRESCRIBE**

**START LOW AND GO SLOW. IN GENERAL:**
- Start with immediate-release (IR) opioids at the lowest dose for the shortest therapeutic duration. IR opioids are recommended over ER/LA products when starting opioids.
- Avoid ≥ 90 MME/day; consider specialist to support management of higher doses.
- If prescribing ≥ 50 MME/day, increase follow-up frequency; consider offering naloxone for overdose risk.
- For acute pain: prescribe < 3 day supply. More than 7 days will rarely be required.
- Counsel patients about safe storage and disposal of unused opioids.
Are opioids effective for chronic pain?
Long-term opioids for chronic non-cancer pain - 1

- 26 studies/4893 pts (through 2009)
- One RCT (comparing 2 opiates)
- Findings:
  - Overall reduction in pain
  - Addiction in only 0.27%
  - Quality of life/functional status “inconclusive”

Cochrane Review Jan 2010
Long-term opioids for chronic non-cancer pain -2

- Effectiveness vs risk of long-term opioid Rx for chronic pain
  - No long term high quality studies
  - No direct evidence of for or against long-term improvement in:
    - Pain
    - QOL
    - Function
- Studies of varying quality show increases in risk
Legal requirements
Legal requirements

- Prescription Drug Monitoring Programs
  - VPMS

- Vermont
  - 2015 and prior:
    - Mandatory VPMS for chronic Rx
    - Best practice prescribing rules
      - consent forms, treatment agreements, risk assessment
  - 2016: Rulemaking in process
    - Limits on size of acute Rx
    - VPMS for every Rx
    - Naloxone for >90 MME or every Rx
Population management, practice improvement & QI
## Population management of chronic disease

<table>
<thead>
<tr>
<th>Concept</th>
<th>Prescriber perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic epidemiology</td>
<td>“I didn’t realize this was such a big problem”</td>
</tr>
</tbody>
</table>
Questions

- Who is prescribing?
- Are there high risk populations?
- How can we do a better job?
Study Population

• Subjects
  • 30,000 primary care patients, 1/3 of whom received an opioid in 2011-2012

• Prescribers
  • Nine primary care offices in FM & IM (138 prescribers)
  • Specialists (370 prescribers)
  • Emergency Medicine (40 prescribers)
Opioid Prescribing – Who is prescribing?

Half of the total opioid amount was prescribed in primary care, 48% in specialty care and 1% in emergency medicine.
Red flags by patient

- High dose opioids for non-cancer pain (3%)
Red flags by prescriber

- Methadone patients/prescriber
  - Median=0; Range 0-57
  - Half of the patients are prescribed by top 20 prescribers
- High dose prescribing

Caution if not adjusting for the population
## Summary population report

<table>
<thead>
<tr>
<th>Prescribing characteristic</th>
<th>Your practice</th>
<th>UVMMC primary care (median) N=92</th>
<th>All Vermont PCP N=~750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique patients for whom you have Rxd an opioid</td>
<td>87</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Proportion of your patients who have four or more prescribers</td>
<td>8%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Proportion of prescriptions in 7 day increments</td>
<td>69%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Unique patients for whom you Rx’d methadone (for pain)</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Patient age, median (range)</td>
<td>59</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Patient sex, % female</td>
<td>44%</td>
<td>59%</td>
<td></td>
</tr>
</tbody>
</table>
### Detail population report (Dr. “Osler”)

<table>
<thead>
<tr>
<th>Name</th>
<th>DOB</th>
<th># opioid Rx by PCP</th>
<th># opioid Rx total</th>
<th># red flags</th>
<th># opioid prescribers</th>
<th>Dominant prescriber</th>
<th>Other prescribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones, John</td>
<td>06/02/42</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>Dr. Osler</td>
<td>-</td>
</tr>
<tr>
<td>Smith, Elvis</td>
<td>03/12/45</td>
<td>24</td>
<td>44</td>
<td>4</td>
<td>5</td>
<td>Dr. Pain</td>
<td>Dr. Pain; Dr. Oncology; Dr. Surgeon; Dr. Ortho</td>
</tr>
<tr>
<td>Lake, Mary</td>
<td>06/22/57</td>
<td>13</td>
<td>26</td>
<td>0</td>
<td>2</td>
<td>Dr. Osler</td>
<td>Dr. Galen</td>
</tr>
</tbody>
</table>
### Chronic Opioid Protocol

This report displays all patients who have the chronic opioid protocol health maintenance modifier. The RXs my Dept Authorized, Unique Auth Provs, Current Med fields are filtered to prescriptions ordered between 8/30/2015 and 8/27/2016. This report is copied by primary clinic, PCP and patient.

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>MRN</th>
<th>DOB</th>
<th>RXs my Dept Authd Provs</th>
<th>Unique Auth Provs</th>
<th>Current Med</th>
<th>Total RXs</th>
<th>Last RX Visit</th>
<th>Last PCP Visit</th>
<th>Urine Drug Screen</th>
<th>Pain Score (date)</th>
<th>VPMS Query (date)</th>
<th>Functional Assess (date)</th>
<th>Fill Count (date)</th>
<th>Meth Sub Bup Curr Med?</th>
<th>Consent (date)</th>
<th>Agrmt (date)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>8/9/16</td>
<td>8/9/16</td>
<td>8/9/16</td>
<td>6</td>
<td>10/26/15</td>
<td>No</td>
<td>10/28/15</td>
<td>No</td>
<td>10/28/15</td>
<td>4/4/11</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
<td>Yes</td>
<td>20</td>
<td>7/1/16</td>
<td>8/3/16</td>
<td>8/3/16</td>
<td>8/3/16</td>
<td>8/10/15</td>
<td>0</td>
<td>12/15/15</td>
<td>5/15/14</td>
<td>No</td>
<td>12/21/15</td>
<td>No</td>
<td>12/7/11</td>
<td>12/7/11</td>
</tr>
<tr>
<td>0</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/1/16</td>
<td>8/1/16</td>
<td>7/7/16</td>
<td>4</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>Yes</td>
<td>12</td>
<td>1/25/16</td>
<td>1/25/16</td>
<td>1/25/16</td>
<td>6/9/09</td>
<td>0</td>
<td>8/17/15</td>
<td>No</td>
<td>1/25/16</td>
<td>No</td>
<td>1/25/16</td>
<td>No</td>
<td>12/5/14</td>
<td>12/5/14</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>Yes</td>
<td>15</td>
<td>7/1/16</td>
<td>7/1/16</td>
<td>7/1/16</td>
<td>7/27/16</td>
<td>0</td>
<td>12/23/14</td>
<td>No</td>
<td>1/13/15</td>
<td>No</td>
<td>3/29/16</td>
<td>No</td>
<td>3/29/16</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>Yes</td>
<td>14</td>
<td>7/7/16</td>
<td>7/29/16</td>
<td>7/29/16</td>
<td>7/29/16</td>
<td>10</td>
<td>5/8/14</td>
<td>No</td>
<td>5/8/14</td>
<td>No</td>
<td>11/11/14</td>
<td>No</td>
<td>8/2/12</td>
<td>8/2/12</td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>Yes</td>
<td>18</td>
<td>8/15/16</td>
<td>8/15/16</td>
<td>8/15/16</td>
<td>8/15/16</td>
<td>9</td>
<td>8/21/14</td>
<td>No</td>
<td>8/21/14</td>
<td>No</td>
<td>12/15/15</td>
<td>No</td>
<td>8/21/14</td>
<td>8/21/14</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>Yes</td>
<td>13</td>
<td>5/16/16</td>
<td>5/16/16</td>
<td>5/16/16</td>
<td>5/16/16</td>
<td>5</td>
<td>12/23/14</td>
<td>No</td>
<td>2/16/15</td>
<td>No</td>
<td>2/18/15</td>
<td>No</td>
<td>2/16/15</td>
<td></td>
</tr>
</tbody>
</table>

**Methadone**
What population reports are being developed?

- *Prescriber Report Cards*
  - Brandeis PDMP Training & Technical Assistance Center
- AZ, KY, OH, others
Prescriber recommendations from Brandeis

- Send report cards 1-4 times/year
  - Or by request
- Assign prescriber to his/her specialty group
- Include resources in a cover letter
- Detailed and complete explanations of each element
- Hyperlink to individual patient level data
- Prescriber data that are determined to be outside the ‘norm’ should be clearly denoted
Oral Health

What is the contribution of dentists and oral surgeons to the opioid supply?
## Annual opioid prescribing by discipline

<table>
<thead>
<tr>
<th>Prescribing metric</th>
<th>General Dental</th>
<th>Oral surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Rx, median</td>
<td>21</td>
<td>490</td>
</tr>
</tbody>
</table>

Source: VPMS (2014) and UVM Medical Center (2011-2012)
Primary Care QI Projects

Or...implementing the guidelines
Opioid QI Project – 2012-2016

- **Rationale**
  - Public health problem
  - Standards of care are changing
  - A small number of cases can cause a lot of office drama/disruption/splitting/night calls/etc
  - Prescribers need more implementation, less education

- QI facilitator using LEAN management approach to improve prescribing in ten community practices
  - Funded by VDH
Opioid Prescription Management Toolkits

Opioid Prescription Management Toolkit for Chronic Pain Sustainable Solutions for Vermont Practice Fast Track and Facilitators Toolkits

Connie van Eghers, DrPH
Research Assistant Professor
UVM College of Medicine

Charles D. MacLean, MD
Associate Dean for Primary Care
University of Vermont College of Medicine
Office of Primary Care

Amanda G. Kennedy, PharmD, BCPS
Director
The Vermont Academic Detailing Program
University of Vermont College of Medicine
Office of Primary Care

What are these toolkits and why were they created?

These toolkits collect the best practice strategies for managing opioid prescriptions in primary care and other ambulatory settings. The strategies resulted from a five-year project (The Opioid Prescribing Quality Improvement Project, 2012-2014) to identify the most helpful methods used to create predictable and well-managed opioid prescribing patterns for physicians, nurse practitioners, and physician assistants and their patients.

What are some of the best practice strategies for managing opioid prescriptions?

New regulations about the prescribing of chronic opioids require the use of consent forms/treatment agreements and use of the prescription monitoring system. The standard of care supported by boards of medical practices across the country recommend, under certain circumstances, a variety of practice strategies to safely prescribe and monitor chronic opioid treatment. These strategies include assessing risk for misuse, use of pill counts and urine drug testing, best-practice documentation, and standardizing prescribing intervals to minimize communication issues among patient, office staff and prescriber, and others.

What are some of the results from the opioid prescribing two-year project?

All ten practices enrolled in the project reported positive results from the best practice strategies they chose to implement from the toolkit. The strategies helped prescribers standardize their approach and increase confidence in managing opioid prescriptions, helped practices change their support systems, and increased provider and staff satisfaction regarding the way opioid prescriptions are managed.

Who should read these toolkits and how are they different?

Fast Track Toolkit: This toolkit is intended for ambulatory care practices whose leaders, providers, and staff want to improve the process of managing opioid prescriptions for their chronic pain, non-palliative care patients. It is for practices with a team ready to make a quick start on a few of the 17 strategies and provides practical advice on getting started, how to adjust practice workflow, and how to implement changes. The toolkit includes an extensive appendix with policies, sample tools, and references.

Facilitator Toolkit: This toolkit is intended for practices that have not yet made a decision to work on opioid prescription management and need to develop a rationale, leadership support, and team to work on this topic. It provides three stages of development: preparation, design (of workflow), and implementation. It provides detailed guidance on measurement, team facilitation, workflow analysis, and follow-up. It is best used by facilitators, staff, or leaders interested in supporting a transformative change in opioid prescription management. It includes the same appendix as the Fast Track Toolkit, with additional materials to support facilitation.
What is the contribution of post-operative prescriptions to the opioid supply?
Background and study design

- **Background**
  - Variability in post-operative discharge prescribing

- **Goals**
  - Assess current opioid prescribing at discharge over 1 year
  - Develop standard approaches

- **Methods**
  - ~ 11,000 operations
  - 66% outpatient
  - Ortho, Gen surg, Ob/gyn, Urology

- **Results**
  - 20% of patients went home with NO opioid
MME/Rx for common procedures

- Lumpectomy: 120
- Appendectomy: 196
- Inguinal Hernia: 225
- Ventral Hernia: 300
- Lap Total Hysterectomy: 300
- Open Abd Hyst: 320
- Carpal Tunnel Release: 75
- Hip Arthroplasty: 375
- Knee Arthroplasty: 480
- TURP: 101
- Cyctourethrscopy & Stent: 113

Morphine equivalents
Patient perspective

- Phone call one week post-op
- “How many pills do you have left?”
## Opioid Rx guidelines at discharge

<table>
<thead>
<tr>
<th>Procedure examples</th>
<th>Maximum MME/Rx</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opioid may not be necessary (prn up to 20 MME/d for 1-2 days)</strong></td>
<td>40</td>
</tr>
<tr>
<td>General Surgery: Lap-Appy; Lap-Chole; Excision breast lesion</td>
<td></td>
</tr>
<tr>
<td>Orthopedics: Wrist arthroscopy; CTS release; Trigger finger;</td>
<td></td>
</tr>
<tr>
<td>Gynecology: Hysteroscopy</td>
<td></td>
</tr>
<tr>
<td><strong>Urology:</strong></td>
<td></td>
</tr>
<tr>
<td>Low dose (30 MME/d for 1-5 days)</td>
<td>30-150</td>
</tr>
<tr>
<td>General Surgery: Open-Appy; Mastectomy</td>
<td></td>
</tr>
<tr>
<td>Orthopedics:</td>
<td></td>
</tr>
<tr>
<td>Gynecology:</td>
<td></td>
</tr>
<tr>
<td><strong>Urology:</strong> Cystoscopy</td>
<td></td>
</tr>
<tr>
<td>Moderate dose (60 MME/d for 3-5 days)</td>
<td>180-300</td>
</tr>
<tr>
<td>General Surgery: Colectomy</td>
<td></td>
</tr>
<tr>
<td>Orthopedics: Arthroplasty hip or knee;</td>
<td></td>
</tr>
<tr>
<td>Gynecology: Hysterectomy (open or lap);</td>
<td></td>
</tr>
<tr>
<td><strong>Urology:</strong> TURP;</td>
<td></td>
</tr>
<tr>
<td>High dose (60 MME/d for &gt;5 days, or &gt;60 MME)</td>
<td>300+</td>
</tr>
<tr>
<td>Exceptional circumstances</td>
<td></td>
</tr>
</tbody>
</table>
Next steps for Office of Primary Care

- VPMS population reports
  - Develop reports
  - Deploy & get feedback from prescribers
- QI work with practices
  - Standard approach across oral surgery
  - Best practice in primary and specialty care
- Ongoing work at UVM Medical Center
  - Opioid “registry” development
The Future

- **Upstream**
  - New respect for opioids with prescriber, patient & community responsibilities
  - Finding and paying for different ways to manage pain without opiates
  - Predicting who is at risk for addiction and targeting preventive efforts
  - Safe storage & disposal of unused medications

- **Downstream**
  - Chronic disease model to manage addiction
  - Expanding addiction services to meet demand
Acknowledgements

- **UVM Medical Center & UVM COM**
  - Carlos Pino
  - Rich Pinckney
  - Amanda Kennedy
  - Benjamin Littenberg
  - Elise Ames MD
  - Bruce Beynnon
  - Kristen Roensch
  - Richard Tan
  - Alicia Jacobs
  - Jennifer Gilwee
  - Liz Cote
  - Sanchit Maruti
  - Michael Goedde
  - EMR & Business Intelligence teams

- **VDH**
  - Harry Chen
  - Shayla Livingston
  - David Horton
  - Meika DiPietro
  - John Brooklyn

- **Participating practices** (medicine/dentistry)
  - Including UVM Med Ctr & CVMC
  - Tom Connelly
  - Community prescribers

- **Vermont Blueprint for Health**
  - Jenny Samuelson
  - Pam Farnham
  - Regional facilitators
Resources

- **CDC guidelines**
  - [http://www.cdc.gov/drugoverdose/prescribing/guideline.html](http://www.cdc.gov/drugoverdose/prescribing/guideline.html)

- **www.PainEDU.org**
  - SOAPP, COMM (screening tools for misuse)

- **Safe and Effective Opioid Prescribing for Chronic Pain (BU)**
  - [www.opioidprescribing.com](http://www.opioidprescribing.com)

- **Prescriber’s Clinical Support System for Opioid Therapies**
  - [www.pcss-o.org/](http://www.pcss-o.org/)

- **Vermont Prescription Monitoring System**
  - [http://healthvermont.gov/adap/VPMS_reports.aspx](http://healthvermont.gov/adap/VPMS_reports.aspx)

- **Brandeis PDMP Center of Excellence**
  - [http://pdmpexcellence.org](http://pdmpexcellence.org)
Thank you for your attention