Background:

During the April 2016 DUR Board Meeting, MS-DUR reviewed the CDC Guidelines for Prescribing Opioids for Chronic Pain\(^1\) and data regarding DOM’s performance on each recommendation that could be addressed through DUR efforts. One recommendation addressed dosing levels.

**CDC recommendation:** *When opioids are started,* clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when increasing dosage to ≥50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥90 MME/day or carefully justify a decision to titrate dosage to ≥90 MME/day.

The CDC report noted that benefits of high-dose opioids for chronic pain are not established. The clinical evidence review found only one study\(^2\) addressing effectiveness of dose titration for outcomes related to pain control, function, and quality of life. This randomized trial found no difference in pain or function between a more liberal opioid dose escalation strategy and maintenance of current dosage. At the same time, risks for serious harms related to opioid therapy increase at higher opioid dosage. The contextual evidence review found that although there is not a single dosage threshold below which overdose risk is eliminated, holding dosages <50 MME/day would likely reduce risk among a large proportion of patients who would experience fatal overdose at higher prescribed dosages. Experts agreed that lower dosages of opioids reduce the risk for overdose, but that a single dosage threshold for safe opioid use could not be identified. Experts noted that daily opioid dosages close to or greater than 100 MME/day are associated with significant risks, that dosages <50 MME/day are safer than dosages of 50–100 MME/day, and that dosages <20 MME/day are safer than dosages of 20–50 MME/day.

Table 4, below, was included in the report to the DUR Board.

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**TABLE 4: Distribution of Beneficiaries Taking Opioids by Maximum Morphine Equivalent Daily Dose (MEDD) for Individual Opioid Prescriptions and For All Concomitant Opioid Prescriptions**

(2015 - Excludes beneficiaries with cancer diagnoses)

<table>
<thead>
<tr>
<th>Maximum MEDD for Individual Rx*</th>
<th>TOTAL (n = 120,158)</th>
<th>FFS (n = 26,014)</th>
<th>UnitedHealth Care (n = 46,135)</th>
<th>Magnolia (n = 48,009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50</td>
<td>92,573</td>
<td>22,284</td>
<td>34,181</td>
<td>36,108</td>
</tr>
<tr>
<td>50 - 89</td>
<td>22,059</td>
<td>3,097</td>
<td>9,562</td>
<td>9,400</td>
</tr>
<tr>
<td>90 - 119</td>
<td>3,609</td>
<td>379</td>
<td>1,541</td>
<td>1,689</td>
</tr>
<tr>
<td>120 +</td>
<td>1,917</td>
<td>254</td>
<td>851</td>
<td>812</td>
</tr>
<tr>
<td>Maximum MEDD for ALL Concomitant Rx*</td>
<td>87,204</td>
<td>21,789</td>
<td>31,222</td>
<td>34,193</td>
</tr>
<tr>
<td>&lt;50</td>
<td>25,515</td>
<td>3,381</td>
<td>11,444</td>
<td>10,690</td>
</tr>
<tr>
<td>50 - 89</td>
<td>4,458</td>
<td>460</td>
<td>2,002</td>
<td>1,996</td>
</tr>
<tr>
<td>90 - 119</td>
<td>2,981</td>
<td>384</td>
<td>1,467</td>
<td>1,130</td>
</tr>
<tr>
<td>120 +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Distributions are significantly different among plans (p < 0.001).

NOTE: Encounter data for Magnolia are not complete for November - December 2015.

The following motion was made and passed by the DUR Board: Individual prescriptions for opioids with an MEDD of ≥ 90 must require a manual PA with documentation that the benefits outweigh the risks and that the patient has been counseled about the risks of overdose and death.

DOM requested that MS-DUR conduct an educational intervention prior to implementing an electronic clinical edit to address this recommendation.

**MAILING**

Exception monitoring was run for to identify opioid prescriptions filled with > 90 MEDD each month. Providers were prioritized for mailings each month based on the number of beneficiaries with exceptions. Providers were only contacted once every two months. The following number of providers received letters each month.
IMPORTANT INFORMATION ABOUT OPIOID PRESCRIPTIONS AND RISK OF OVERDOSE

«date»

Dear Dr. «MD_name»,

On August 1, 2019, the Division of Medicaid (DOM) will implement several new pharmacy claims system edits as recommended by the Drug Utilization Review (DUR) Board in response to the Centers for Disease Control and Prevention (CDC) Guidelines for Prescribing Opioids for Chronic Pain and per the Centers for Medicare and Medicaid Services (CMS) requirements². These changes will be applicable for beneficiaries in the fee for service (FFS) and Coordinated Access Network (CAN) plans.

WHY YOU ARE RECEIVING THIS LETTER

DOM is mailing all providers with patients identified as receiving opioids with a Morphine Equivalent Daily Dose (MEDD) ≥ 90. On August 1, 2019, any prescription (whether individual or cumulative daily sum of all prescriptions for the patient) with a MEDD of ≥90 will deny. These patients will require a prior authorization (PA) to continue to receive opioids at a dose of ≥90 MEDD. The PA form can be found at

https://medicaid.ms.gov/providers/pharmacy/pharmacy-prior-authorization/.

Our analysis of Medicaid prescription data for «month» identified the following prescription filled by a beneficiary under your care.

<table>
<thead>
<tr>
<th>Beneficiary Name</th>
<th>DOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>«Bene_name»</td>
<td>«bene_dob»</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Date Filed</th>
<th>Medication Prescribed</th>
<th>Quantity</th>
<th>Days Supply</th>
<th>MEDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>«pharmacy_name»</td>
<td>«last_rx»</td>
<td>«drug_name»</td>
<td>«submitted_quantity»</td>
<td>«days_supply»</td>
<td>«DAILY_MED»</td>
</tr>
</tbody>
</table>

The enclosed Provider Summary describes the increased risks of overdose and death associated with high doses of opioids. Recent studies demonstrate that a patient’s cumulative morphine equivalent daily dose (MEDD) is an indicator of potential dose-related risk for adverse drug reactions to opioids, including overdose. The Centers for Disease Control recently released guidelines for prescribing opioids which recommended that prescribers should carefully reassess evidence of individual benefits and risks when prescribing dosages ≥50 MEDD, and should avoid prescribing dosages ≥90 MEDD unless there is significant clinical justification. DOM’s goal is to reduce beneficiaries’ risks of adverse events associated with opioid use, such as overdose and addiction.

² The Centers for Medicare and Medicaid Services (CMS) requires that state Medicaid programs have drug utilization review safety edits for opioid refills and an automated claims review process to identify refills in excess of state limits, monitor concurrent prescribing of opioids and benzodiazepines, on or prior to October 1, 2019. This is one of the many Medicaid–related provisions specified in Section 1084 of the SUPPORT Act (H.R. 6, the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment [SUPPORT] for Patients and Communities Act, the bipartisan bill aimed at addressing the nation’s opioid overdose epidemic).
Evidence-Based DUR Initiative

WHAT WE ASK OF YOU?
Several non-opioid pharmacologic therapies (including acetaminophen, NSAIDs, and selected antidepressants and anticonvulsants) are effective for chronic pain and we encourage you to consider these options first. For patients being prescribed opioids, please prescribe or titrate to lowest effective doses whenever possible. Given the documented increased risks associated with high dose opioid prescriptions, it is important that patients and/or caregivers be counseled about the risks of overdose and appropriate action steps, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, or higher opioid dosage (≥50 MME) are present. The following web address provides a MEDD conversion table for opioid products - https://www.cdc.gov/drugoverdose/pdf/calculating_total_daily_dose-a.pdf.

Beginning August 1, 2019, if you think it is clinically necessary for a patient to receive an opioid at a dose ≥ 90 MEDD, you must complete and submit a PA request form.

Sincerely,

Carlos A. Latorre, MD, FAAFP
Medical Director
Mississippi Division of Medicaid

Terri R. Kirby, RPh, CPM
Director, Office of Pharmacy
Mississippi Division of Medicaid

Eric Pittman, PharmD
Project Director
MS-DUR
Provider Summary:
Using Morphine Equivalent Daily Dosing To Prevent Opioid Abuse and Overdose

An estimated 20% of patients presenting to physician offices with non-cancer pain symptoms or pain-related diagnoses (including acute and chronic pain) receive an opioid prescription. Over the past two decades, a marked increase in the use of opioid pain relievers has resulted in an explosion of opioid dependency and overdose deaths, and has fueled an epidemic of heroin addiction. Since 1999, opioid prescriptions have increased fourfold, and from 1999 to 2014, 165,000 Americans have died from overdoses of prescription pain-killers. Opioid prescribing practices have driven resurgence in heroin use, with four of five heroin users starting with prescription opioids. Mississippi is one of the nation’s leaders in opioid prescriptions, with 1.2 opioid prescriptions for every citizen in 2012. Given the serious consequences of long-term opioid use, in March 2016 the Centers for Diseases Control and Prevention (CDC) released their final version of their “Guideline for Prescribing Opioids for the Management of Chronic Pain.”

Morphine Equivalent Daily Dose (MEDD)

Daily morphine milligram equivalents are used to assess comparative potency of opioid products, but not to convert a particular opioid dosage from one product to another. The terminology for daily morphine equivalency may vary depending on the resource used, and may be described as morphine equivalent daily dose (MEDD), morphine equivalent dose (MED), or morphine milligram equivalents (MME). By converting the dose of an opioid to a morphine equivalent dose, a clinician can determine whether a cumulative daily dose of opioids approaches an amount associated with increased risk.

Recent studies demonstrate that a patient’s cumulative morphine equivalent daily dose (MEDD) is an indicator of potential dose-related risk for adverse drug reactions to opioids, including overdose. Patients with a MEDD of 1 – 20 mg had a 0.2% annual overdose rate. Patients receiving a MEDD of 100 mg had almost nine times as much risk of overdose and a 1.8% annual overdose rate.

### Table 1. Increased Risk With Higher MEDD

<table>
<thead>
<tr>
<th>MEDD Level</th>
<th>HR* for Any Overdose Event</th>
<th>OR** for Overdose Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 49</td>
<td>1.44</td>
<td>1.32</td>
</tr>
<tr>
<td>50 - 99</td>
<td>3.73</td>
<td>1.92</td>
</tr>
<tr>
<td>≥ 100</td>
<td>8.87</td>
<td>2.04</td>
</tr>
</tbody>
</table>

* Adjusted hazard ratio compared to MEDD of 1 - 19  
** Adjusted odds ratio compared to MEDD of 1 - 19

The 2016 CDC chronic pain management guidelines recommend that prescribers should carefully evaluate/ reassess evidence of individual benefits and risks when increasing dosage to ≥50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥90 MME/day or carefully evaluate and justify a decision to titrate dosage to ≥90 MME/day.

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3. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016 Recommendations and Reports / MMWR March 18, 2016 / 65[1]:1-49  
https://www.cdc.gov/mmwr/volumes/65/wr/mm6501e1.htm
What You Can Do To Help Prevent Opioid Prescription Overdose

The CDC recommends opioids be prescribed at the lowest effective dose and for as short a period of time as possible.

- **You should monitor MEDD when writing opioid prescriptions.** A conversion table for the opioid products most frequently prescribed in the Mississippi Medicaid program can be downloaded from the CDC’s website:
  

- **Before prescribing opioids, you should check your patient’s information in the Mississippi Prescription Monitoring Program** to be sure the patient is not “doctor shopping”, not already taking opioids prescribed by another provider and/or currently being treated for opioid dependence.
  

- **When an MEDD above 50 is needed,** implement additional precautions, including increased frequency of follow-up and consider offering naloxone and overdose prevention education to both patients and the patients’ household members.