

# Many more opioids users may be at risk than formally diagnosed

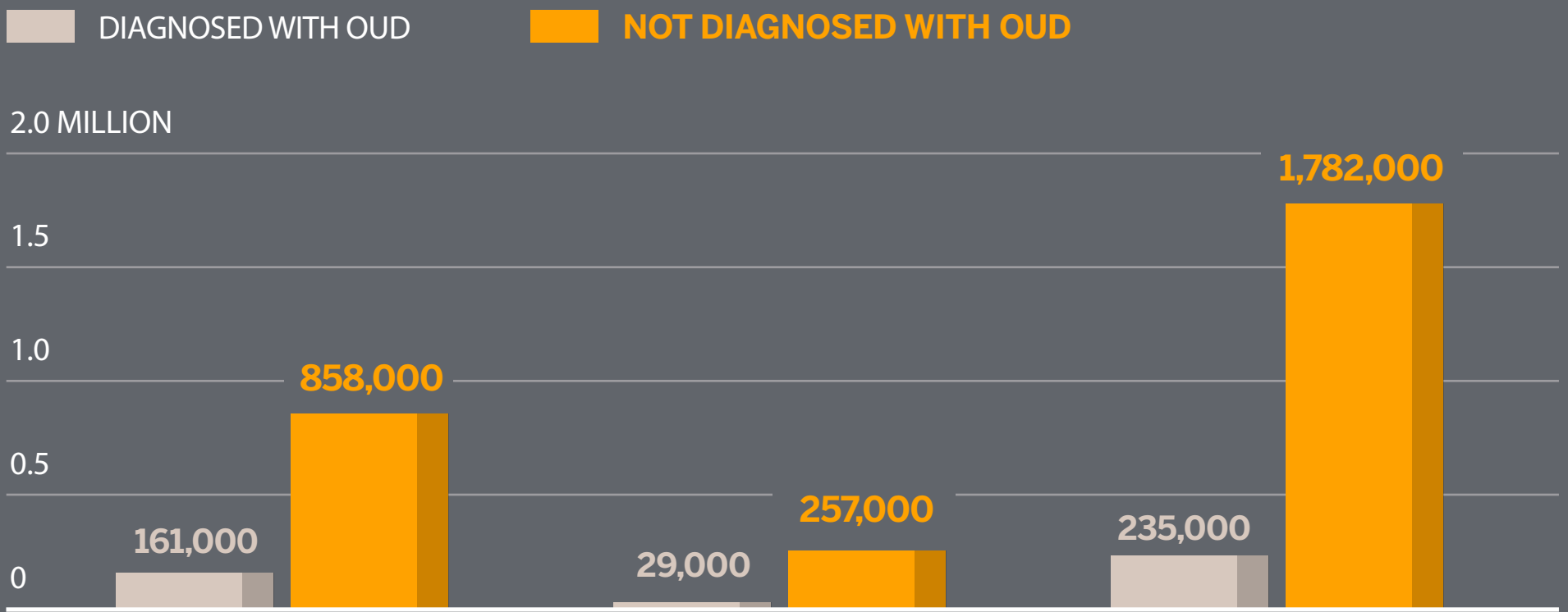
OPIOID PRESCRIPTION PATTERNS SHOW OVER FIVE TIMES AS MANY “SUPER-USER” PATIENTS AS THOSE DIAGNOSED WITH OPIOID USE DISORDER

In 2015, over 1.5 million Americans were diagnosed with an opioid use disorder (OUD), and that number represents just a fraction of those who struggle with opioid misuse. Milliman studied data of 3.9 million commercially insured members who were prescribed opioids but have not been diagnosed with an OUD and found that there may be many more individuals at risk for complications of high opioid usage than have been formally diagnosed.

## People diagnosed with OUD represent a small share of high-rate opioid users

### NUMBER OF PATIENTS EXCEEDING KEY OPIOID USE THRESHOLDS IN 2015

EXTRAPOLATED TO NATIONAL TOTALS FOR THOSE WITH COMMERCIAL INSURANCE COVERAGE



PATIENTS TREATED FOR 360 DAYS +



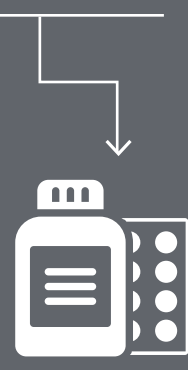
The CDC recommends three days of opioids or fewer for the treatment of acute pain, though it varies for chronic (non-cancer) pain treatment where chronic opioid therapy has been proven effective but comes with risks.

TREATED WITH HIGH POTENCY OPIOIDS



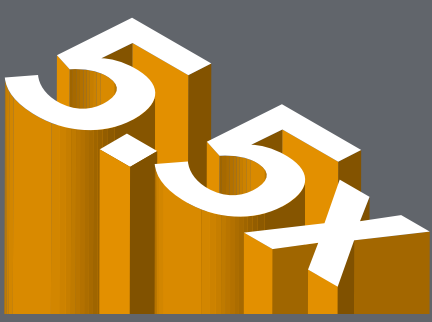
Morphine Milligram Equivalents (MME) measure the relative potency of opioids. The CDC recommends prescribing the lowest effective opioid dosage, generally 90 MME or less per day. Shown here are patients with over 75,000 cumulative MME for the year, averaging over 200 MME/day.

HIGH OPIOID COVERAGE



Proportion of days covered (PDC) shows the percentage of time for which a patient had an opioid prescription. Shown here are patients with PDC higher than 75%.

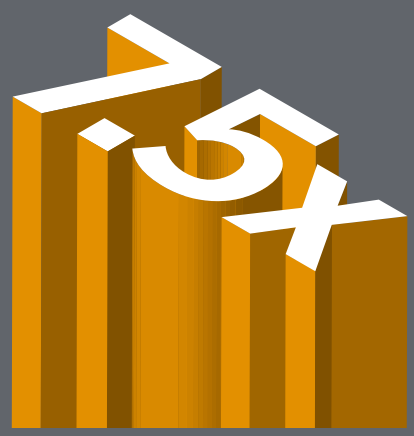
### PATIENTS WITH HIGH OPIOID USAGE WHO HAVE NOT BEEN DIAGNOSED WITH OUD:



THE NUMBER OF PATIENTS DIAGNOSED WITH OUD

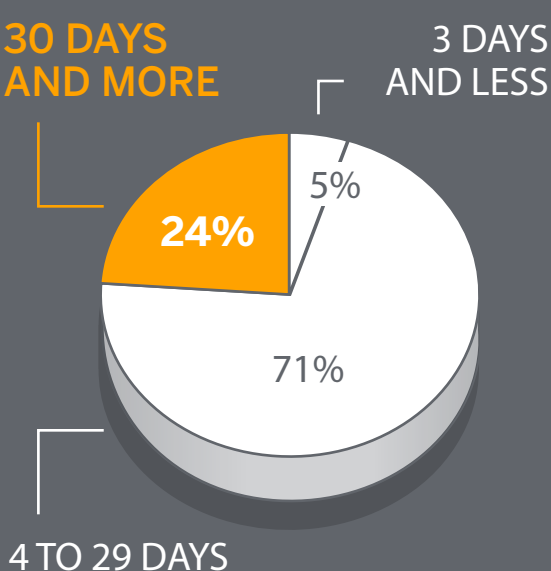


THE NUMBER OF PATIENTS DIAGNOSED WITH OUD

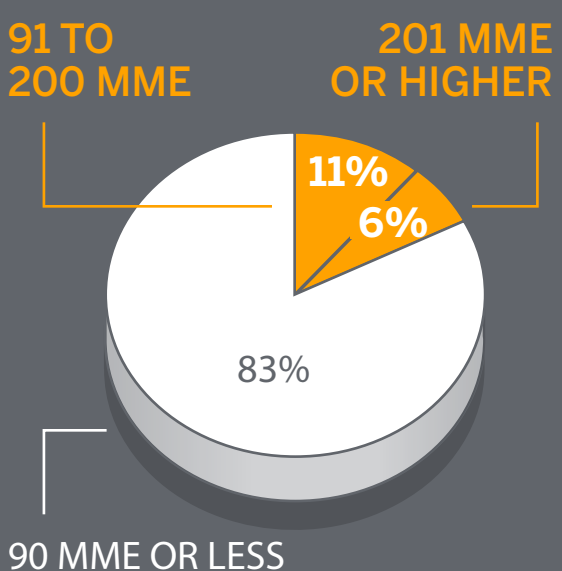


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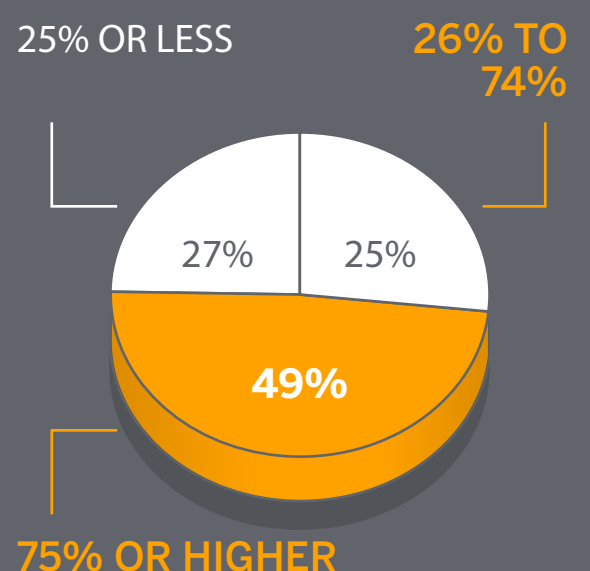
### OPIOID PRESCRIPTION LENGTH FOR OUD PATIENTS (PER SCRIPT)



### MME DAILY AVERAGE FOR OUD PATIENTS



### PROPORTION OF DAYS COVERED FOR OUD PATIENTS



PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING