Explain the Overdose Risk Score *(Guidance on Page 2)*

NarxCare™

Bullets

- The Overdose Risk Score (ORS) is based on an Ohio study evaluating 1,687 unintentional overdose **deaths** from the year 2014 and was developed using modern data science techniques.
- The ORS ranges from 000-999.
- The risk of unintentional overdose death approximately doubles for every 100pt increase in the ORS.
- Using the 000-190 (< 200) scoring group as a referent group results in the following odds ratios:

Overdose Risk Score	Odds Ratio of Unintentional Overdose Death
000-200	1
201-300	10
301-400	12
401-500	25
501-600	44
601-700	85
701-800	141
801-900	194
901-990	329

- More than 70 variables were evaluated in the creation of the ORS. Out of these 70 variables, ten were chosen for the model based on their independent predictive ability.
- In some locations, a history of previous overdose may be available. Patient's with a history of previous overdose automatically get a score of 991 unless they have had multiple overdose events, in which case the last digit equals the number of previous overdoses (i.e. 3 prior overdoses = 993)
    - THERE IS ALWAYS THE CHANCE THAT AN OVERDOSE HAS OCCURRED AND NOT BEEN REPORTED. IN THE CASE OF AN UNREPORTED OVERDOSE, THE OVERDOSE RISK SCORE MAY *UNDER REPRESENT* THE TRUE OVERDOSE RISK OF THE PATIENT

Brief Narrative

The overdose risk score is a predictive score for unintentional overdose death. It often correlates with the Narx Scores. When differences exist, it is often because of different weighting associated with those elements that contribute to overdose risk. For instance, pharmacy usage is more predictive of overdose death than MED and therefore carries more weight in the ORS as compared with its weight in calculating a Narx Score. Also, certain decreases in use may *increase* risk of death.

Clinical Guidance

The overdose risk score (ORS) can be applied to clinical practice in a manner analogous to daily morphine equivalent dose (MED). The CDC opioid prescribing guidelines recommend naloxone be considered at 50 MED and that most patients should be treated at a dose of 90 MED or less. Using an equivalent population methodology, the following ORS ranges can be associated with CDC MED based guidance.

Score	Approximate CDC MED Equivalent	Guidance*
< 010-440	< 50 MED	Consider other sources of risk beyond PDMP data. See below
450 - 650	50 MED (or more)	Consider naloxone prescription See below
> 650	90 MED (or more)	Consider naloxone prescription, especially if previous overdose is documented Review use patterns for unsafe conditions. If multiple providers involved in unsafe prescribing discuss concern with patient and consider contacting other providers directly. If multiple pharmacies involved in unsafe prescribing discuss concern with patient and consider pharmacy lock-in program. If overlapping medications of same or different type, discuss concern with patient and consider taper to lower dose and/or discontinuation of potentiating medications. If patient has evidence of a substance use disorder, consider inpatient admit or referral for outpatient evaluation and treatment.

* Explanations and guidance within this document are not intended to be all inclusive of the options available to the clinician or pharmacist. NarxCare scores and reports are based on search criteria supplied and the data entered by the dispensing pharmacy. For more information about any prescription, please contact the dispensing pharmacy or the prescriber. NarxCare scores and reports are intended to aid, not replace, medical decision making. None of the information presented in NarxCare reports should be used as sole justification for providing or refusing to provide medications.