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RECORDED HOME OXIMETRY (RHO) IMPLEMENTATION: BASELINE DATA COLLECTION



UMass Memorial
Children's Medical Center



University of
Massachusetts
UMASS Medical School

SECTION 1: VON VARIABLES

Please see VON abstraction information sheet for additional guidance.

VON Query



- You must have access to the VON Nightingale Reporting System to abstract data from VON
- The entire process takes approximately 15-20 minutes to complete (see next slides for walkthrough)
- Your team will be provided with a walkthrough presentation and instruction sheet

Step 1: Log In



- Please contact your VON administrator(s) if you do not have access to the Nightingale Reporting System
- Go to the VON website: www.vtoxford.org
- Log in by clicking the orange “Log in” button and entering your log in information



Step 1

Step 2: Navigate to Reporting



- Click “Go to Nightingale Reporting” or select “Nightingale Reporting” from the “Data” drop-down

VON Vermont Oxford NETWORK

Welcome, [Redacted]
Center [Redacted]
[Portal Home](#) | [Log out](#)

Data ▾ Education and Quality Improvement ▾ Community ▾ Help Center

Welcome to the VON Member Portal

The coronavirus pandemic has created severe uncertainty and disruption for VON members. We are here to support you and your team however we can.

[VON COVID-19 Resources](#) | [See updates affecting VON members](#)

Key Performance Measures

[Go to Nightingale Reporting](#)

See How We Can Improve Health Outcomes

Step 3: Set Parameters



- In the right panel, set the following parameters:
 - Population: All VLBW Infants
 - Location: All Infants
 - Start Year: 2018
 - End year: 2020

A screenshot of the RHO2 web application interface. The 'Comparison Data' tab is selected. The 'Current Measures' section shows a list of measures: 'Any Late Infection - Your Center', 'CLD: Infants < 33 Weeks', 'Cystic PVL', 'Death or Morbidity', 'Mortality', 'NEC - Your Center', 'Severe IVH', and 'Severe ROP'. Below this, a message states: 'The chart requested contains no data and cannot be displayed. Please try again.' On the right side of the interface, there are sections for 'Comparison Groups' (Group 1 (Box) and Group 2 (Diamond) both set to 'None'), 'Group By' (set to an empty dropdown), and 'Filters' (Population: 'All VLBW Infants', Location: 'All Infants', Start Year: '2021', End Year: '2021', and 'Show Survivors Only' checked). A callout box labeled 'Step 3' points to the 'Filters' section, specifically highlighting the 'Population', 'Location', 'Start Year', and 'End Year' dropdowns.

Step 3

A callout box titled 'Step 3' that highlights the parameters to be set in the RHO2 interface. It contains the following settings: 'Comparison Groups' (Group 1 (Box) and Group 2 (Diamond) both set to 'None'), 'Group By' (set to an empty dropdown), and 'Filters' (Population: 'All VLBW Infants', Location: 'All Infants', Start Year: '2018', End Year: '2020', and 'Show Survivors Only' checked).

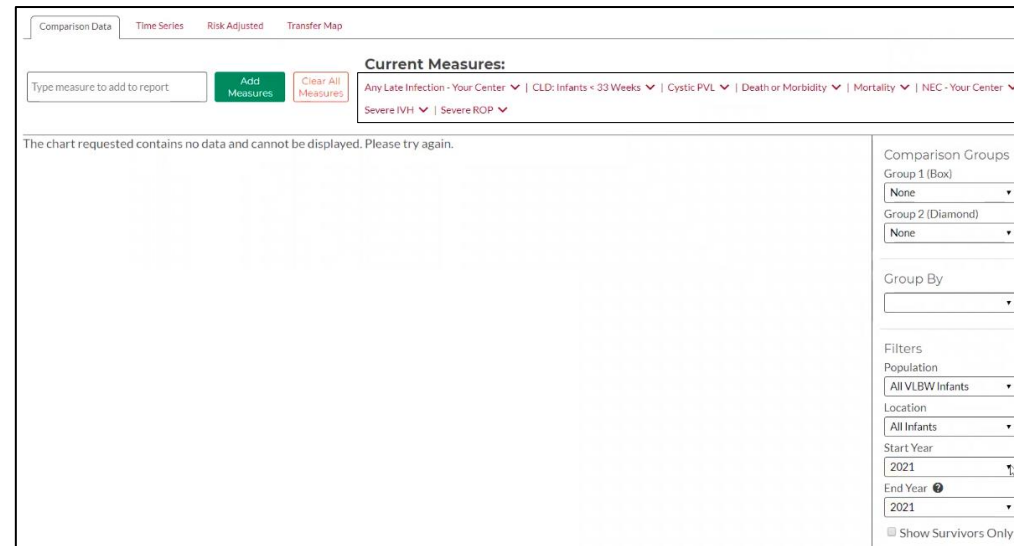
Step 4: Clear All Measures



- Click “Clear All Measures”
- After you complete this step, there should be no measures listed under “Current Measures”



Step 4



This section should be empty after completing Step 4

Step 5: Select Measures



- Using the “Type measure to add to report” functionality, select all the measures outlined in the written instructions included in this toolkit
- Click “Add Measures” once they have been selected
- Your list should resemble the one below once all measures have been added

Step 5

Comparison Data Time Series Risk Adjusted Transfer Map

Current Measures:

Acetaminophen for PDA ▼ | Antenatal Steroids - All Infants ▼ | Anti-VEGF Drug ▼ | C-Section ▼ | Conventional Ventilation - At 36 Weeks ▼ |

Enteral Feeding at Discharge (Home) - Any Human Milk ▼ | Enteral Feeding at Discharge (Home) - Human Milk Only ▼ |

Enteral Feeding at Discharge (Home) - Human Milk and Fortifier/Formula ▼ | Enteral Feeding at Discharge (Home) - Formula Only ▼ |

Enteral Feeding at Discharge (Home) - No Enteral Feeding ▼ | Enteral Feeding at Discharge (Home) - Unknown Enteral Feeding ▼ |

High Flow Nasal Cannula - At 36 Weeks ▼ | High Frequency Ventilation - At 36 Weeks ▼ | Ibuprofen for PDA ▼ |

Inhaled Nitric Oxide - Any Location ▼ | Initial Resuscitation - CPAP ▼ | Initial Resuscitation - Cardiac Compression ▼ |

Initial Resuscitation - ETT Ventilation ▼ | Initial Resuscitation - Epinephrine ▼ | Initial Resuscitation - Face Mask Ventilation ▼ |

Initial Resuscitation - Laryngeal Mask Airway ▼ | Initial Resuscitation - Nasal Ventilation ▼ | Initial Resuscitation - None ▼ |

Initial Resuscitation - Oxygen ▼ | Initial Resuscitation - Surfactant ▼ | Interventional Catheterization for PDA Closure ▼ | Male ▼ |

Maternal Race - Hispanic ▼ | Maternal Race - Non-Hispanic Asian ▼ | Maternal Race - Non-Hispanic Black or African American ▼ |

Maternal Race - Non-Hispanic Native American ▼ | Maternal Race - Non-Hispanic Other Race ▼ | Maternal Race - Non-Hispanic White ▼ |

Monitor - At Discharge Home ▼ | Multiple Gestation ▼ | NEC - Any Location ▼ | NEC Surgery - Any Location ▼ | Nasal CPAP - At 36 Weeks ▼ |

Nasal Ventilation - At 36 Weeks ▼ | Open Thoracotomy for PDA Closure ▼ | Oxygen - At 36 Weeks ▼ | Oxygen - At Discharge Home ▼ |

PDA Surgery - Any Location ▼ | Patent Ductus Arteriosus ▼ | Pneumothorax - Any Location ▼ | Prenatal Care ▼ | Severe IVH ▼ |

Small for Gestational Age ▼ | Steroids for CLD - Any Location ▼ | Thoracoscopic Surgery for PDA Closure ▼ |

Weight at Initial Disposition - < 10th Percentile ▼ | Weight at Initial Disposition - < 3rd Percentile ▼

Type measure to add to report Add Measures Clear All Measures

Step 6: Adjust Your View



- Scroll to the bottom of the screen
- Under “View Options,” select “Infant List”
 - If Infant List is already selected, skip this step

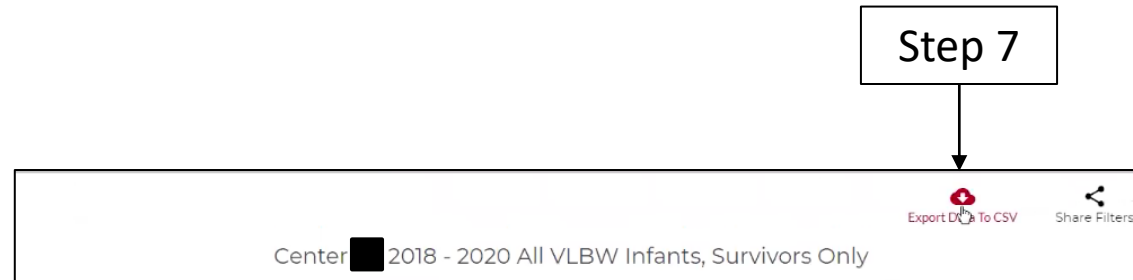


Step 6

Step 7: Export CSV File



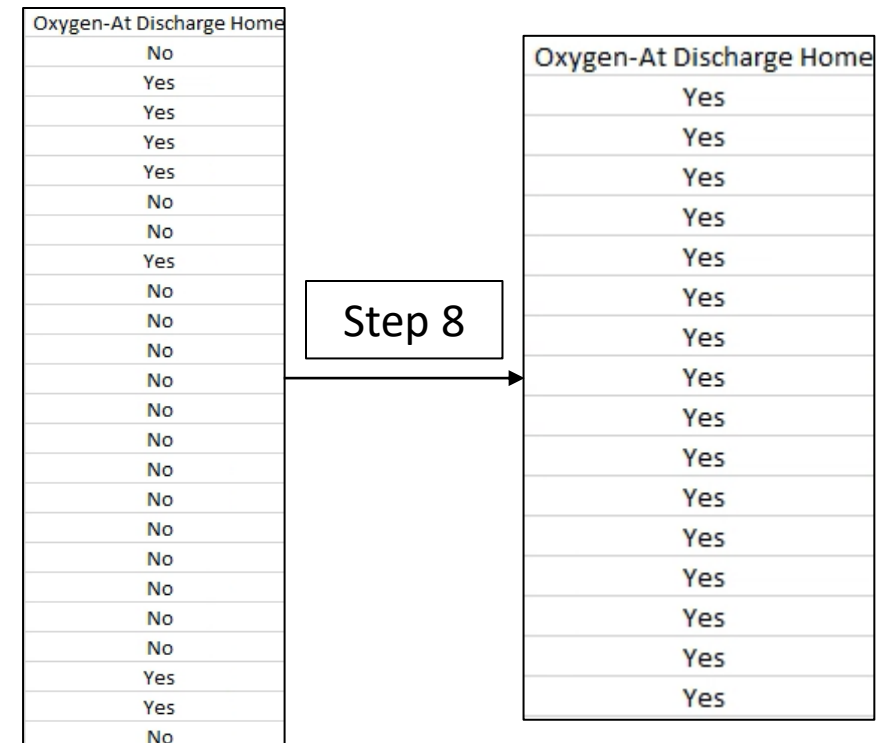
- Click “Export Data to CSV” and download the report
- Open the CSV file to ensure that it has downloaded correctly



Step 8: Filter CSV File



- With the CSV file open, navigate to the column that says “Oxygen- At Discharge Home”
- Delete any **row** that contains “No” or is blank
- Repeat this step with the column “Monitor- At Discharge Home”



Step 9: Send File to UMass for Upload



- Please email the edited CSV file to Maria.Matoshi@umassmed.edu and cc Lindsey.Simoncini@umassmed.edu and Heather.White@umassmed.edu
- Once received by UMMS, the study team will upload it into a secure REDCap database

SECTION 2: OTHER BASELINE VARIABLES

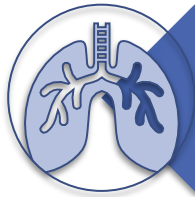
Outpatient Baseline Variables



Some variables not available from VON will need to be collected to establish proper baselines



CSV file and operational definition list will be provided



Additional variables include HOT duration, number and timing of adverse events, and days of invasive mechanical ventilation



To ensure accurate linking of the VON variables to the outpatient variables, the infant's ID for the additional baseline variable collection will be their VON ID

Outpatient Baseline Variables (cont.)



Example spreadsheet

Record ID	Referring NICU	How many days was the infant on a ventilator?	What was the infant's initial oxygen flow rate at NICU discharge? (cc/min)	NICU Length of Stay (days)	Home Oxygen Therapy Duration (days)
123-456	UMass	16	500	110	52
123-457	UMass	4	250	60	50
123-458	UMass	22	125	98	47
123-459	UMass	8	125	45	31
123-460	UMass	12	1000	125	72
123-461	UMass	2	125	72	40

Send File to UMass for Upload



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SECTION 3: FREQUENTLY ASKED QUESTIONS



Send File to UMass for Upload

Q: Do I need to send the VON data and other baseline data sent to UMMS at the same time?

A: No, data can be sent separately or together. The infant's ID will serve as a link between their VON data and their other baseline data.

Q: My site has limited research support. What if I'm unable to provide all the data variables?

A: We understand that sites will have varying levels of data collection support. Please reach out to the study team with any concerns.

Q: Who do I contact with questions regarding baseline data collection?

A: Please contact Lindsey.Simoncini@umassmed.edu and Maria.Matoshi@umassmed.edu with any questions. They will be escalated to other study team members on an as needed basis.