



Putting power at your fingertips

Clinical cases with Care Orchestrator and Connected Trilogy

Healthcare is more complex than ever due to a growing and aging population and soaring healthcare costs, along with increased pressure to reduce those costs without sacrificing the quality of care. This increases the need for accurate, real-time data for patient and provider accountability that will lead to the delivery of the right care at the right time.

With the changing healthcare landscape, providers need to be more efficient in their daily practice and reduce overall costs. Efficiencies can be found by reducing the requirement to drive to a patient's home for an unnecessary troubleshooting visit, or by communication and coordination between the patient and members of the care team, such as the respiratory therapist at the provider, physicians and nursing.

Actionable information offers clinicians the ability to act quickly and decisively to provide patient care in a timely and efficient manner. Combining Care Orchestrator, a patient management software system, with a ventilatory support device, Trilogy, allows for quality care to be delivered while gaining operational efficiencies.

Connected care from Philips responds to the need for data and the proactive delivery of care across the healthcare continuum. Care Orchestrator empowers providers to work smarter and more efficiently and to make more informed decisions regarding patient care. It will convert the raw data into insights. This gives providers, physicians and patients the power to impact care at the right time.

Every day, Philips helps an average of **2,600 US-based customers** securely manage more than **830,000 patient lives** through Philips cloud-based systems*

With Care Orchestrator, customized rules and notifications to remotely monitor and provide proactive notification of a patient's changing condition can be established for fast, informed clinical decisions. There are three types of notifications that can be set for a patient: usage rules, health rules and reminders. Usage rules are triggered when the device has not downloaded any therapy data after a customized set number of days. Health rules are part of the rule set assigned to a patient and are triggered on therapy data download alerting you of a changing clinical condition. Reminder sets are a way to set a time-based notification for different patient sets for tasks such as follow-up, resupply or other. Connected Trilogy health rules alerted through Care Orchestrator can be customized with patient-specific ventilator parameters to trigger notifications that proactively identify patients with potential increased need for intervention.

Clinical Cases

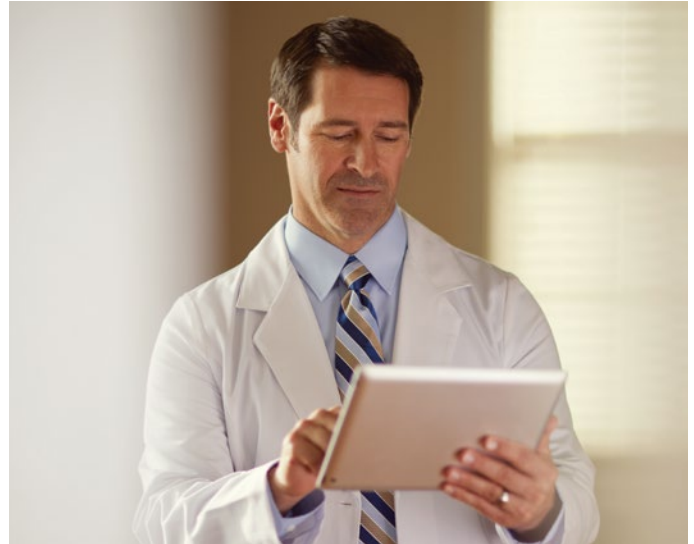
Decrease in % patient-triggered breaths

Case 1

A patient with Amyotrophic Lateral Sclerosis (ALS) on the Connected Trilogy, monitored by Care Orchestrator, alerted for a decline in the patient-triggered breaths to the mid 40% range, suggesting a worsening of muscular weakness due to progression of the ALS. The respiratory therapist (RT) switched the sensitivity from AutoTrak to AutoTrak Sensitive, resulting in better ventilatory synchronization, and increased the patient-triggered breaths to the 80% – 90% range. Subjectively, the patient stated that they felt significantly better.

Case 2

Care Orchestrator alerted that the % patient-triggered breaths of a morbidly obese user with Muscular Dystrophy (MD) ventilated via a Trilogy was <20%. The ventilator was changed from AutoTrak to AutoTrak Sensitive, assisting in increasing the % patient-triggered breaths to 60% – 80%. The patient was now more at ease with the device.



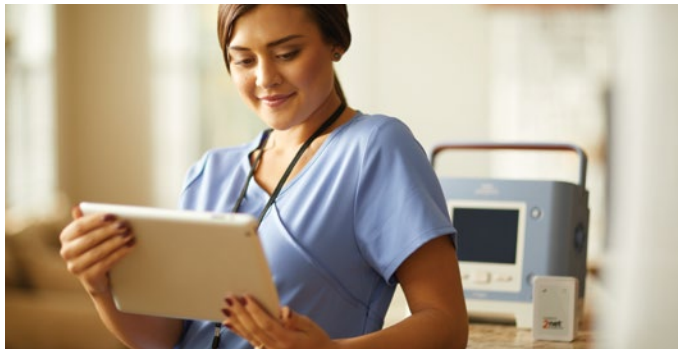
High leak

Case 1

High leak alert from Care Orchestrator signaled to the respiratory therapist to contact the chronic obstructive pulmonary disease (COPD) patient to understand the issue. Through a phone call it was determined that a hole in the mask was causing the higher-than-normal leak. A new mask was shipped (avoiding an in-person visit) to the patient and follow-up data downloads determined that the leak was now in a normal range.

Case 2

On data review, prior to a routine visit, a chronic respiratory failure and COPD patient was noted to have a high mask leak. Information gleaned from Care Orchestrator guided the RT to counsel the user during the visit on the application of the current mask vs. a complete refit to a new mask. Follow-up data downloads revealed that the leak had decreased, as well as an increase in adherence to therapy.



Tidal volume (VT) threshold

Case 1

Prior to the monthly visit, a patient with COPD noninvasively treated with a Trilogy in the automatic volume assured pressure support (AVAPS) mode was noticed on Care Orchestrator to be consistently receiving 25 cmH₂O but not obtaining the set VT of 450 cc. The maximum AVAPS limit was increased to 30 cmH₂O, so that the VT could be achieved. The referring physician was notified of the patient's change in condition.

Case 2

A patient with spinal muscle atrophy (SMA) had a set VT of 700 cc in the AVAPS mode on Trilogy. The Tidal Volume Threshold alert notified the RT that the patient was receiving between 575 – 625 cc with an inspiratory positive airway pressure (IPAP) of 32 cmH₂O at the setting for the AVAPS Max limit. The patient was monitored over the next few days via Care Orchestrator. The VT increased to the 700 cc level, the respiratory rate decreased from 12 bpm to 10 bpm and the % patient-triggered Breaths increased from 40% to 90%, indicating a positive treatment result in the changes made.

Care Orchestrator empowers your connected care teams to make better, faster and more informed decisions regarding patient care. More than 830,000 patient lives have been managed through Philips cloud-based solutions since 2018 – proof that having targeted and efficient care at your fingertips is a powerful way to help patients get the care they need.

*Based on snapshot data from Philips EncoreAnywhere database. Average 30-day daily patients with at least 1 associated therapy download via EncoreAnywhere = 833,229 as of January 2018.

