

Clinical element

Incisive CT – OnPlan gantry controls improve patient care



Overview

Philips Incisive CT helps meet some of an organization's most pressing challenges with intellect at every step, from acquisition through results, and across all fronts: financial, clinical and operational. Like never before, user and design efficiencies come together for wise decisions from start to finish. The patient-side gantry controls featured as part of the Incisive CT OnPlan Workflow Suite are an example of this, improving the experience for both the patient and the user.

Background

The CT user's first priority is the patient, rather than the process necessary to get to results. Patients who have never had a scan before or who have just received a diagnosis that can be life-changing need to feel as relaxed as possible in order to complete a scan that offers the best clinical results. To get those results as quickly as possible, it benefits the user to be able to concentrate on the patient and not the scanner controls.

The value of gantry controls

Controls located on either side of the gantry add efficiency by making it easy for two users to simultaneously access different functions during patient set-up. For example, one user can enter patient scan parameters while the other continues to set up the patient. However, a single user working alone also has all necessary tools to successfully set up and perform the scan.

Touchscreen gantry controls bring routine workflow to the patient's side

Before Incisive CT, once the patient was in the CT scan room and placed on the couch, the user would move the couch to a specific scan location and then leave the room to complete the scan set-up.

With the Incisive CT, OnPlan touchscreen gantry controls allow the user to stay with the patient until exam set-up is complete. Access to the HIS or RIS, along with user-defined exam cards, keeps the user at the patient's side during scan set-up.

Touchscreen control

Adding multi-gesture touchscreen control for fast loading and unloading of the patient, OnPlan eliminates the need to locate a specific button on the gantry controls to initiate movement. This gives the user more time to concentrate on the patient.

Advances to aid the exam

Two front panels located on either side of the couch allow for exam set-up

- Patient registration from the hospital information system (HIS) or radiology information system (RIS)
- · Patient exam orientation
- Exam card selection
- ECG placement guidance
- · Breath-hold instruction
- Precise incremental table movements; down to 0.5 mm at a time
- · Save table position
- · Multi-gesture controls for fast load/unload
- \cdot Ability to end the exam at the gantry

OnPlan gantry controls allow for routine workflow without leaving the patient's side.



Time-saving steps

Set-up is now complete. After the user selects "Start exam", the system is ready to scan once the user returns to the CT console. These time-savings steps can be especially helpful when there is a pediatric, trauma or difficult patient on the couch, which means that timing s crucial for successful completion of the exam.

Additional tools to speed the exam

Additional tools can assist in preparing the patient, helping reduce anxiety for both the user and the patient.

- · ECG help tools
- Breath-hold instruction
- Guidance lights

ECG help tools

Cardiac procedures can be intimidating, as the exams might not be routinely performed or might be new to the user. The ECG placement tool, which shows a lead set-up diagram, features a graphic for proper lead placement to improve user confidence and to aid in performing exceptional cardiac exams. This feature can also be helpful in explaining to a patient which leads are being placed and why, leading to a more compliant patient and improving clinical outcomes.

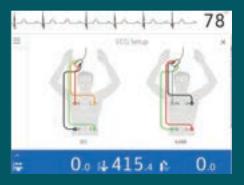
Breath-hold instruction

With many CT scans, such as cardiac, chest or body, patient breath-holds are important for the duration of the exam. Familiarizing the patient with the phrases that will be heard during the breath-hold, along with the required duration of the breath-hold, can aid patient compliance. OnPlan gantry controls provide the capability for the user to practice the breath-hold instruction with the patient. Selecting "Breath-hold practice" displays a countdown showing the length of the breath-hold, along with the specific phrase the patient will hear. While remaining at the gantry, the user can change phrases and also the language selected to accommodate specific patient needs.

Touchscreen control to initiate couch movement.



ECG placement tool contributes to a successful cardiac exam.



Breath-hold practice can aid patient compliance.



After the scan, the user can end the exam using **OnPlan gantry controls**.



Guidance lights

In addition to breath-hold practice, the gantry has ribbon lights around the exterior ring to indicate the status of the system system, whether in standby mode or during scanning, which the patient can observe when going into the gantry feet-first.

Completing the scan

With the patient and scanner set-up complete, the user returns to the CT console to complete the acquisition. Each of the activities at the gantry provides time-savings to ensure the user can spend more time with the patient and less time planning and prepping at the CT console.

Once the scan is complete, the user can return to the patient and end the exam using the OnPlan gantry controls. This is a major benefit for ED and ICU patients who need to be returned to their rooms as quickly as possible.

Conclusion

With OnPlan gantry controls, the core workflow of the user can be completed right at the patient's side. Advanced and easy-to-use tools for patient and protocol selection, patient positioning and patient instruction are designed to help increase patient compliance and improve overall satisfaction for both patient and user. This helps lead to a successful exam. OnPlan patient-side gantry controls combined with adaptive intelligence at the console enable consistency from operator to operator and reduce time to results by 19%.*

Clinical relevance

The Incisive CT OnPlan gantry controls help improve the experience for patients and staff, and also aid user efficiency, improving patient care.

*Based on a study at Oz Radiology Group, Australia.

