What’s new in Release 6.0

Hospitals and healthcare systems are continually being challenged to provide a higher quality of care cost-effectively. Premium and high end ultrasound today demands improved clinical information from each scan, faster and more consistent exams that are easier to perform, and a higher level of confidence, even for technically difficult patients.

This release introduces the latest advances to the Philips EPIQ and Affiniti ultrasound portfolio with clinically tailored tools designed to elevate diagnostic confidence to new levels.

The ultimate ultrasound solution for pediatric assessment

Pediatric radiologists work with small, vulnerable patients, and interact with concerned parents and caregivers. Ultrasound is an ideal modality for pediatric diagnosis providing a gentle approach to imaging with no exposure to ionizing radiation and rarely requires sedation. Our ultimate solution for pediatric assessment is customized to provide quick and confident, yet gentle imaging tailored to the specific needs of children.

Features and benefits:

World’s first PureWave pediatric transducer family: mC12-3, eL18-4, C9-2 and C5-1 optimized for pediatric imaging.

The mC12-3 PureWave array transducer is our first micro-convex PureWave transducer for pediatric imaging provides superior clinical imaging to facilitate critical clinical decisions. It also reduces the need for additional ionizing or expensive exams by supporting clinical diagnosis with ultrasound.

- Unique ergonomic design with rounded edges and contours for extreme patient comfort
- Longer thinner cable provides superior versatility for NICU imaging
- Pediatric presets for Preemie Head, Neonatal Head, Ped Abd and Ped Bowel
- The addition of the Neonatal Head preset to the eL18-4
- XL14-3 Ped Abd Preset
- MicroFlow Imaging now offers MFI HD
- ElastQ Imaging FDA approved for Pediatrics
- Real-time, large field-of-view assessment of tissue stiffness, including a confidence map
- CEUS for pediatrics
- New services with CEUS for pediatric applications (liver microcirculation and VCUG) reduce XRAY VCUG by 50%*

* Single-center evaluation of 449 pediatric patients undergoing VUS or VCUG examination. Ultrasound images were obtained using a 2800p/4 system (Acuson, Mountain View, CA, USA) and Levovist (Schering, Berlin, Germany) contrast medium. Darge, K. et al. Reduction in Voiding Cystourethrographies After the Introduction of Contrast Enhanced Sonographic Reflux Diagnosis. Pediatr Radiol 2001; 31: 780-795.
**Philips Abdominal Aortic Aneurysm Model (AAA) Model**

Abdominal aortic aneurysms (AAA) cause more than 175,000 deaths globally every year, with an 80% mortality rate if ruptured. The current standard of care for AAAs requires a mix of 2D ultrasound and Computed Tomography Angiography (CTA), but each of these methods has its drawbacks: inter-operator variability with 2D ultrasound and patient exposure to high levels of radiation and nephrotoxic contrast agents with CTA.

The Philips Abdominal Aortic Aneurysm Model detects, segments, and quantifies 3D ultrasound data for use in surveillance of native and post-EVAR abdominal aortic aneurysms. It provides key measurements including the maximum anterior-to-posterior diameter, partial volume, and the centerline of the aneurysm throughout the volume of the 3D ultrasound acquisition.

**Key benefits:**

Studies show that 3D ultrasound provides inter-operator reproducibility superior to that of 2D ultrasound in the surveillance of native abdominal aortic aneurysms.

3D ultrasound can also estimate diameter and volume of abdominal aortic aneurysms with an acceptable reproducibility and agreement with CTA, while avoiding exposing patients to radiation and nephrotoxic contrast agents.

X6-1 xMATRIX transducer gives clinicians the power to generate a 3D acquisition of an abdominal aortic aneurysm with the press of a single button.

**Additional Vascular Features**

- New mC12-3 PureWave transducer for vascular applications
- The mC12-3 offers a unique ergonomic design with rounded edges and contours
- The small curved footprint lends itself to anatomy that is difficult to scan with a linear transducer
- XL14-3 xMATRIX performance enhancements
- Image quality enhancements for Lower Extremity vascular applications
- New 3D Swivel now allows the user to export XL14-3 xMATRIX 3D images as a DICOM multi-frame object to PACS
- MFI HD on the mC12-3 and C5-1 transducers
- Contrast enhanced ultrasound (CEUS) enhancements on the eL18-4 transducer offers breakthrough vascular contrast performance

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*510(k) pending, not available in USA, please contact your Philips representative for available products and services in your area.

** Abdominal aortic aneurysms - [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4687424/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4687424/)
Workflow Improvements

- Availability of L12-3 Ergo transducer on the Affiniti platform
- Ergonomic and lightweight
- Superb vascular imaging for carotid and upper and lower arterial and venous exams
- Supports advanced MicroFlow Imaging for vascular applications
- XRES Pro next-generation image processing for enhanced border definition and exceptional plaque conspicuity
- ElasQ Imaging on C5-1. ElastQ Imaging provides a non-invasive option for providers to assess tissue stiffness with shear-wave elastography. This feature is most commonly used to monitor liver fibrosis
- L12-3 Ergo and L12-3 vascular image quality enhancements
- TrueVue Pro and FlexVue 2.0 with Orthogonal View

Affiniti Enhancements

Our Affiniti platform is an ultrasound system that works hard for you every day, and in so many ways. With Release 6.0 we continue to bring new features to the platform.

Key enhancements

- Annotation/Body Markers access; Hide/Show Factory Presets, SmartExam protocol workflow enhancements, the ability to hide factory presets, and more
- Vascular Annotations Improvements. Vascular annotations pages are now organized by exam type eliminating the need to create custom vascular annotations pages or search through a list of unrelated annotations
- GI protocol improvements via SmartExam
- Set-up option to turn off Native capture in regular imaging
- 3D/4D – 3D/4D User defined preset, 3D/4D remember orientation
- MaxVue on Affiniti 30
- Tumor contour (PercuNav)
- Affiniti 30 Enhancements. MaxVue and GI contrast enhanced ultrasound (CEUS) capabilities are now available as purchasable options on Affiniti 30
OB/GYN Enhancements

Pregnancy is a special time for mothers-to-be as they begin to bond with their babies. It is critical to detect any potential chromosomal, congenital and growth abnormalities as early as possible, as misdiagnosis could lead to long-term health issues or fetal demise. The Philips OB Solution for earlier diagnosis focuses on three main areas to enhance the experience of both physician and mother to be: image quality, lifelike imaging and efficient workflow. The OB solution introduces a set of tools that helps clinicians make efficient and confident assessments of fetal health while keeping up with high demand.

Features and benefits:

- Improved Image quality - Exceptional imaging with ergonomic transducers
- Efficient workflow – Optimized to limit key strokes and meet the clinical demand
- Color and TSP IQ Enhancements on the C5-1 transducer for OB, Fetal Heart and Fetal Echo. The OB image quality enhancements to the C5-1 transducer offer better imaging and diagnostic confidence including:
  - Better performance in B-Mode and Color Doppler
  - XRES Pro
  - Better edge definition and reduced speckle noise
  - MFI & MFI HD
  - Increased vessel detection and color flow sensitivity
  - Transmit improvements
  - Increased spatial resolution, image uniformity
  - Improved color edge smoothness
- New presets on the V9-2 for transperineal and gynecological pelvic floor exams. Both of these presets expand the use of the V9-2 transducer and enhance its capabilities for clinicians
- MicroFlow High Definition Imaging (MFI HD)
- FlexVue 2.0 and Orthogonal View provides two new features for clinicians to use for in-depth OB/GYN anatomy evaluation
- TrueVue Pro adds new functions to the TouchVue feature. Users can now use the touch screen to sculpt, erase, and pinch zoom. The new Graphics Processing Unit (GPU) adds a boost in performance which includes faster touch screen transition times and volume image quality may be better resolved. Users can now use the touch screen to sculpt, erase, and pinch zoom
- 3D user presets and tilt. 3D Anatomical Presets enable users to save multiple different 3D parameters for use in future exams. For example, a user may choose to create a preset called “baby face” which saves their preferred settings for TrueVue, aReveal, TouchVue smoothing and threshold, when imaging fetal faces. 3D Anatomical Presets are useful to all OB/GYN 3D applications, including obstetrics, gynecology, fertility, gynecology oncology and pelvic floor assessments
- Gyn Contrast Preset on 3D9-3v allows visualization of the fallopian tubes with a simple procedure
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<tr>
<th>Feature</th>
<th>In Core/Optional</th>
<th>EPIQ Elite</th>
<th>EPIQ 7</th>
<th>EPIQ 5</th>
<th>Affiniti 70</th>
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