STANDARD IMAGING®

QA MANAGEMENT

STANDARDIZE.
CUSTOMIZE.
OPTIMIZE.

QA PILOT

QA MANAGEMENT

STANDARD IMAGING®

QA PILOT

FROM THE GRAND OVERVIEW TO THE GRANULAR DETAIL, SECURELY MANAGE YOUR DEPARTMENT, QA DATA AND METRICS, ANYTIME, ANYWHERE.

Today's busy radiation therapy departments are burdened by the vast number of quality assurance tasks, regulatory obligations and management duties required to ensure cancer patients receive safe, high quality care. To do all of this in an efficient, cost-effective manner may seem inconceivable — that is, until you understand the power of QA Pilot.

QA Pilot provides a standard platform to schedule, perform, analyze and report QA tasks, replacing checklists and spreadsheets, to ensure optimal machine performance within regulatory guidelines. Easily manage QA oversight through dashboard views and comparative analytics across sites and machines. Departmental oversight is accomplished through HIPPA-compliant internal communications, document controls, and individual task assignments. Efficiency gains are made by logging and tracking linac downtime, equipment service items, and calibration due dates within the software.

As a cloud-based application, QA Pilot safeguards your data to the highest degree using a HIPAA compliant service within the AWS cloud services. Data are securely transmitted and archived using advanced encryption methods at every level. Therefore, you can safely access and manage your department activities, QA data and metrics in real time from one secure, unified location anywhere internet is available, with any web-capable device.

WORKING REMOTELY = WORKING EFFICIENTLY WITH QA PILOT!

HIPAA-COMPLIANT ACCESSIBILITY ANYWHERE INTERNET IS AVAILABLE TO:

- Review and approve QA reports
- Analyze data and metrics across sites and machines
- Oversee clinics, machines, schedules, etc.
- Create QA schedules, custom tests and templates
- Upload, share and disperse documents to individuals at various locations
- Assign and track individual tasks
- Log and track machine and QA device downtime, service, and calibrations
- Improve patient safety through the use of an Incident Learning System (ILS)
- Prepare for and manage accreditation and audits

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STANDARDIZATION FEATURES

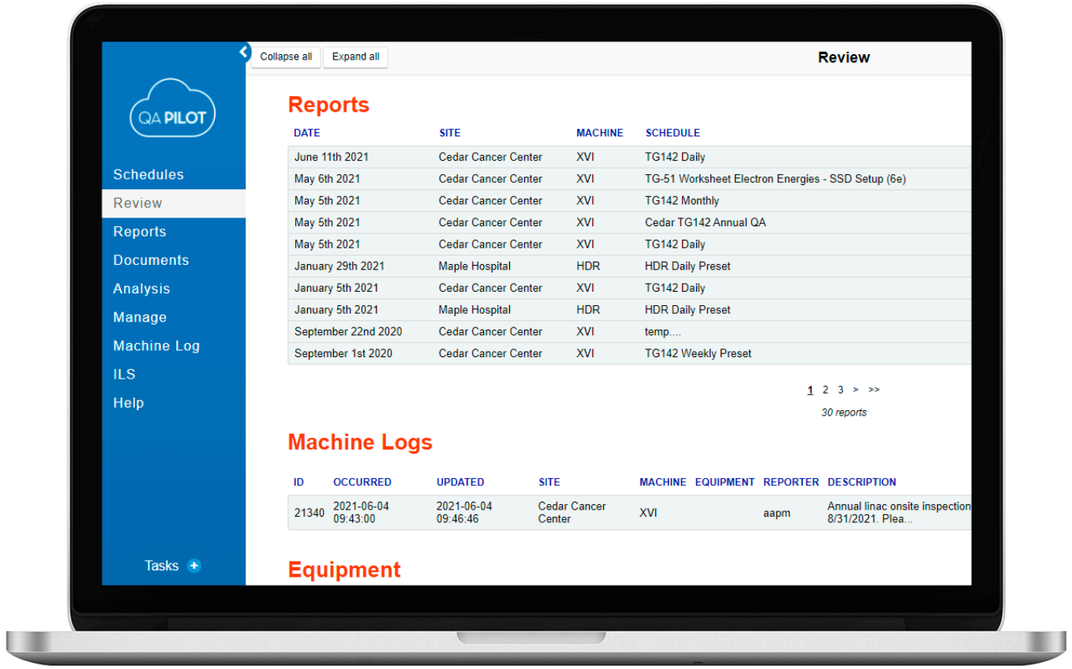
ALL HOSPITALS AND CLINICS ARE LOOKING TO ACCOMPLISH MORE WITH LESS WITHOUT SACRIFICING QUALITY OF CARE. STANDARDIZATION IS KEY TO ACHIEVING EFFICIENCY GAINS AND QA PILOT IS THE KEY TO STANDARDIZATION.

PERIODIC QA

Standardizing routines for daily, monthly, and annual QA across sites and machines is made easy with preset tests and templates for QA recommended by TG-142 and other protocols. Take advantage of our vendor neutrality to upload data effortlessly from a variety of sources for QA reports. Use trended test data to compare machine metrics within your organization and identify areas for improvement.

DASHBOARDS

Dashboard summaries throughout the software facilitate oversight so physicists can easily track the status of scheduled QA, machine downtime, equipment-related tasks and more according to practice standards.



REPORTS AND DOCUMENTS

The valuable information contained in reports and documents is foundational to implementing standardization goals across sites and machines within your organization. QA Pilot automatically generates reports for all QA tasks performed using the software. Documents can be uploaded to specific QA tests, schedules, machine logs, the QA Pilot ILS, and the document repository to become part of the permanent departmental records. Make regulatory reviews and audits hassle-free by giving auditors a guest login which allows them limited access to reports and documents to perform their reviews.

COMMUNICATION

Standardize the communication of departmental updates and notifications to sites, user types and/or individuals with a required acknowledgment. Instant out-of-tolerance email alerts are sent to physicists so they can prioritize tasks of immediate concern. Machine and device service issues are easily communicated to vendors and personnel via the HIPAA-compliant email service built into the software.

QA MANAGEMENT

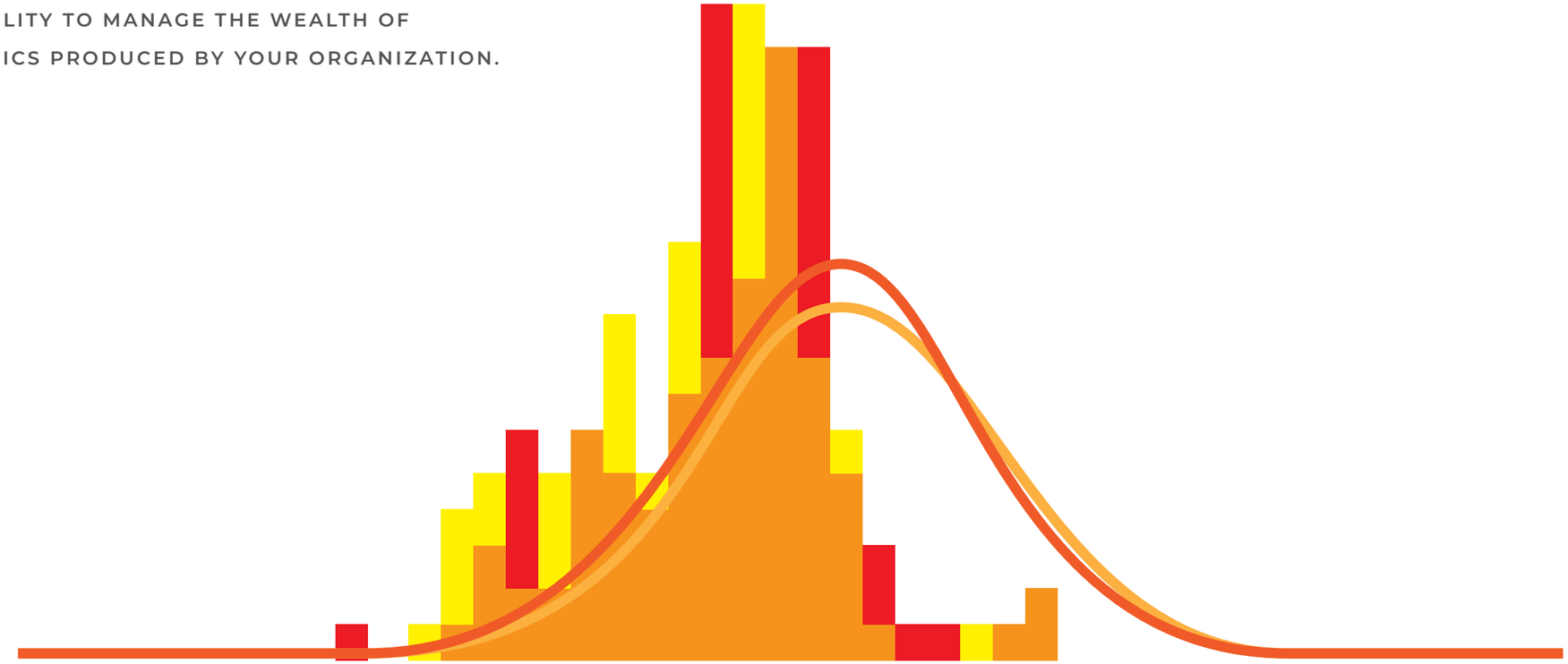
STANDARD IMAGING

QA PILOT

- Schedules
- Review
- Reports
- Documents
- Analysis
- Manage
- Machine Log
- ILS
- Help

OPTIMIZATION FEATURES

ENJOY OPTIMAL FLEXIBILITY, SCALABILITY AND AFFORDABILITY TO MANAGE THE WEALTH OF DATA/METRICS PRODUCED BY YOUR ORGANIZATION.



INTEROPERABILITY

Vendor-neutral software means allowing automatic data integration from a variety of sources via the equipment hub or the use of API. We support a wide range of machine types including traditional C-arm linacs, proton systems, CyberKnife, GammaKnife, HDR and CT.

PROCESS IMPROVEMENT

Use metrics collected for machines, devices and QA activities to drive process improvement within a department or throughout the entire organization.

PREDICTIVE ANALYTICS

Monitor machine performance over time through comprehensive data trending. Apply statistical techniques to trended data across sites and machines to identify potential issues and respond before they impact continuity of care.

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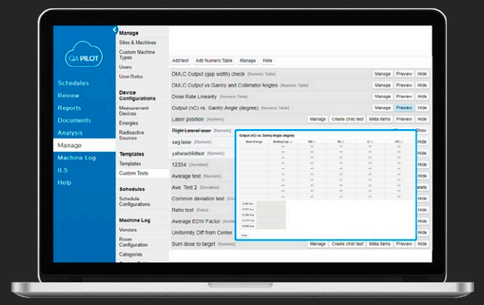
CUSTOMIZATION FEATURES

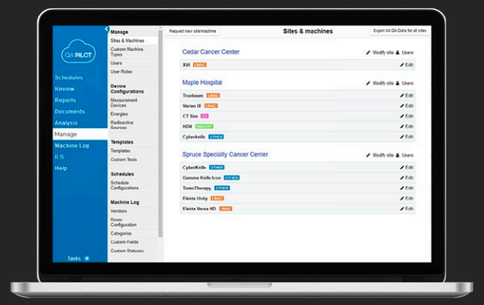
WHETHER FOR A SINGLE SITE, OR A LARGE MULTI-SITE INSTITUTION, CUSTOMIZATION IS KEY TO IMPLEMENTING A SUCCESSFUL MANAGEMENT OVERSIGHT PROGRAM.



CUSTOMIZE YOUR WORKFLOW

Start with preconfigured tests and templates and then configure them according to your departmental workflow. QA schedule and test names can be edited to use terminology familiar to your team. Create a custom test once and apply it to any QA template. Once a QA template has been created, schedule it to any machine within the organization and further customize if necessary for specific linacs. Use the same tests and templates for multiple machines at multiple sites, then customize tolerance levels per machine as needed.

GOOD SOFTWARE PROVIDES THE TOOLS, GREAT SOFTWARE LETS YOU CUSTOMIZE THEM.



CUSTOMIZE YOUR DATA

Replacing spreadsheets is easier than ever with the variety of mathematical functions that can be performed on data/metrics entered in QA schedules. Averages, ratios, deviations, common denominators and averaged numerators are just some of the functions available in custom tests. Create custom data tables that allow multiple functions to be carried out on entries by row, column, or selected cells. Export and report data in the format that suits your needs.

CUSTOMIZE YOUR INSTITUTION

Extensive customization features in the software mean that your institution is accurately characterized for performance oversight. QA Pilot provides the basic elements for machine types, user roles, equipment types, machine log and ILS input fields, etc. as a starting point. Build on this foundation to further customize roles, titles, descriptors, metrics and more specifically for your organization.

CUSTOMIZE YOUR EFFICIENCY

Understanding what, when, how and why problems happen is vital to process improvement. Here again, QA Pilot provides the necessary tools. Machine logs are created to track equipment downtime, outstanding service items, and various recordkeeping functions for linacs and other equipment. The ILS is used to record (potentially) adverse events so that they can then be evaluated and corrective action taken. All incidents logged in the ILS portion of the software are encrypted upon entry and only viewable by those assigned to the ILS committee.

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QA PILOT WITH PIPSPRO™ AUTOPILOT

ELIMINATE TEDIOUS MANUAL INTERVENTION

AUTOMATED IMAGE-BASED TESTS FOR:

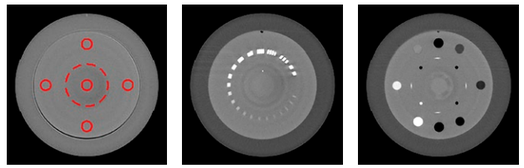
- TG-142 monthly Planar MV and kV spatial resolution, contrast, scaling, uniformity and noise
- TG-142 monthly Cone-Beam CT geometric distortion, spatial resolution, and contrast
- TG-142 monthly Cone-Beam CT HU constancy, uniformity and noise
- TG-142 monthly mechanical light/radiation field coincidence
- TG-142 monthly mechanical jaw position indication and cross-hair centering
- TG-142 annual mechanical collimator, couch, gantry starshot
- TG-142 annual mechanical coincidence of radiation and mechanical isocenter (Winston-Lutz test)
- TG-142 weekly MLC qualitative picket fence test, leaf position accuracy, and travel speed
- TG-142 monthly MLC setting vs. radiation field for two patterns
- TG-142 Annual MLC transmission
- TG-142 Annual MLC leaf position repeatability
- TG-142 Annual MLC segmental IMRT
- TG-142 Annual MLC moving window IMRT

BEYOND TG-142

- Advanced CT analysis
- Detection and reporting of CatPhan setup rotation, tilt, and yaw
- Asymmetric field test (using FC-2 phantom)
- Varian VMAT Test 2 and Test 3
- DICOM and TIFF image support
- Automatic placement of ROIs by phantom type
- Preset templates including image-based tests
- Selectable test frequency
- Support for SI imaging phantoms
- Support for non-SI imaging phantoms
- Dashboards
- Integration with QA Pilot

CT IMAGING QA

PIPSpro AutoPilot tests all CT imaging performance parameters required by TG-142 with results displayed in a concise format for review. Easily scan the Catphan® 503, 504, or 604 phantom according to protocol and drag and drop the CT series into the software for automatic analysis.

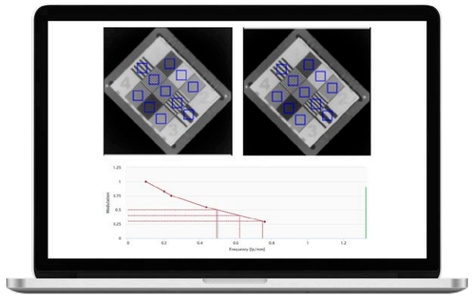


Go beyond TG-142 requirements to get in-depth reports of CT systems' imaging characteristics with PIPSpro AutoPilot that include:

- Sensitometry
- Contrast detectability
- MTF from beads & wires
- Effective energy
- Critical frequency
- Slice width
- CT linearity
- Phantom position, rotation and yaw

PLANAR IMAGING QA

Get fast, accurate TG-142 MV and kV planar imager QA results using the Standard Imaging QC3 and QC-kV phantoms. ROIs of these, and other common phantoms, are automatically identified, analyzed and reported within the assigned QA schedule.



Reported measurements for planar MV and kV tests include:

- MTF Curve
- Spatial Resolution (50%, 40% and 30%)
- Measured Field Size and Area
- Contrast and CNR
- Uniformity

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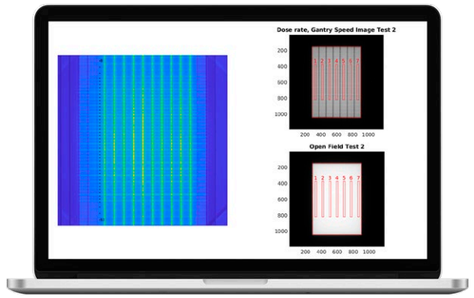
AUTOMATED IMAGE ANALYSIS

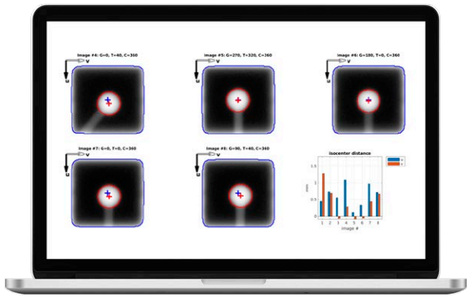
ADD-ON FOR ADDED CONVENIENCE



MLC — PICKET FENCE TEST

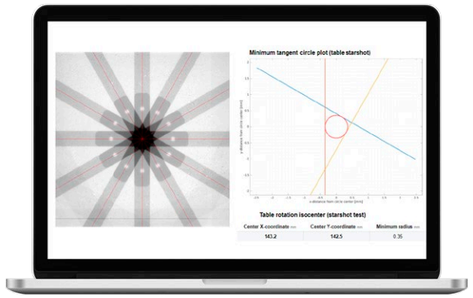
Automatically characterize leaf position accuracy for your Varian or Elekta MLCs using EPID images. PIPSpro AutoPilot automatically recognizes the pattern used and measures position and picket FWHM for all leaves at each stopping point in the pattern.

Additional Varian MLC tests are preconfigured and selectable for template and schedule configuration.



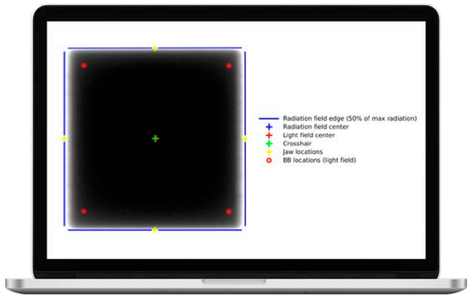
STEREOTACTIC QA

Choose the appropriate coordinate system and use any common Winston Lutz phantom to acquire test images. The uploaded image files automatically analyze the coincidence of radiation and mechanical isocenters to within 0.1 mm. The ideal shift and shift magnitude are also reported.



STARSHOT

Quantify the rotational deviations in gantry, collimator and table mechanical isocenters using the starshot analysis. TIFF images are used for the gantry starshot. DICOM images are automatically composited once uploaded to create the collimator and table starshot images for analysis.



LIGHT/RADIATION FIELD

Whether collimated by MLCs or jaws, radiation light field images are automatically sorted and fully analyzed using the Standard Imaging FC-2 phantom + Center Marker.

ASYMMETRIC FIELD MEASUREMENTS

Use the FC-2 phantom to go above and beyond TG142 to test asymmetric fields! Automated results include the measured vs nominal field size and field edge positions vs nominal.

SECURITY FEATURES

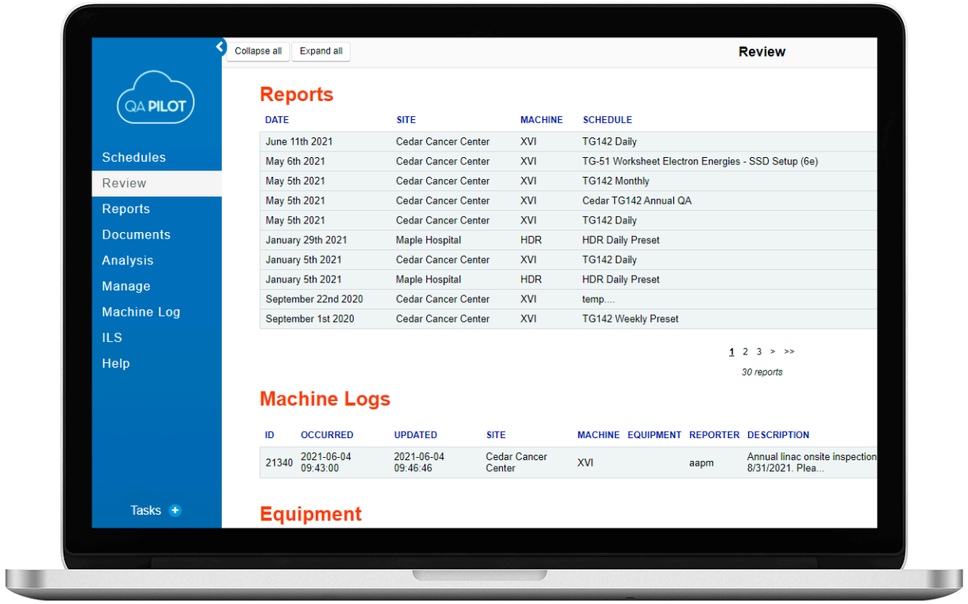
KEEP YOUR DATA SAFE!

Data security is of the highest importance to you, so it's of highest importance to us! Multiple security features are at work keeping your data secure at all times.

All QA Pilot data are encrypted in transit from the customer sites to Standard Imaging and at rest in the QA Pilot database using SSL connections. These data contain no Personal Identifiable Information (PII), or Protected Health Information (PHI).

Your QA Pilot data are stored in a HIPAA compliant service within the AWS cloud service which means that they are protected by the physical and environmental security management systems of Amazon Web Services. AWS are held to the highest industry standards when it comes to infrastructure security.

QA Pilot provides each customer with the tools to manage user rights and permissions and to create and suspend user accounts. Back-end support is provided to manage account permissions with customer supplied requirements, if needed, to protect data and account access.



WHAT QA PILOT DOES DO:

- Lowers entry costs
- Scales to meet your needs
- Secures your data
- Dates and timestamps every entry
- Eases regulatory preparation and oversight
- Improves operational performance

WHAT QA PILOT DOES NOT DO:

- Limit the number of users
- Limit access to your data
- Require large initial capital investment
- Require the replacement of QA devices
- Require software reinstallation for every update
- Limit custom tests to simple pass/fail or text fields

QA MANAGEMENT

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