

# Caseworx

IAO EDITION



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Commercial Photographer, Lightwriters



**JKL Software**

# Caseworx

## REVISION HISTORY

2015, Mar 26 – v1.0 Initial release

2015, Apr 22 – v1.1 Added new feature information, case types (fellow/diplomate), re-submission feature, tracing+overlay



# Caseworx

OVERVIEW



# IBO Case Presentation Format



- Full narrative output
- Copies or prints of radiographs
- Ceph tracings sets (radiograph, tracing, overlay)
- Mounted or grid printed photographs
- Boxes of study models or digital model images
- IBO Cephalometric Summary

# Common Case Problems

Missing details or items completely

- Fields left blank
  - Can't tell if left out or just plain missing
- “Normal” or intentional blank should have something indicating such
  - “Within normal limits”
  - “No extraordinary findings”
  - “Not applicable for this patient”
- Missing whole sections of photos or imaging
  - Should have Pre-Tx, Post-Tx
  - Post+2 years if applicable

# Common Case Problems

Not enough details

- Assumption that examiner knows the patient like you do
- Narrative does not establish a good picture of patient for examiner
  - Poor or thin patient history
  - Should already have data based on actual patient evaluation and management, right?
  - Missing or incomplete clinical evaluation
  - Lack of scientific evidence in details
    - “Patients weight was normal for their age”
    - “Patient weighed 155lbs, within the normal range for their age”

# Common Case Problems

Improper formatting, grammar and/or spelling errors

- Poor grammar and sentence structure
  - What is “that” and where is “there”?
- Narrate case in neutral viewer position
  - No: “I saw the patient and she had pain in the left side of her face”
  - Yes: “The patient presents with a severe case of pain in the left side of her face”
- Data in wrong place(s), not in right order
- Not formatted to “IBO presentation standard”

# Common Case Problems

Poor imaging

- Radiographs not clear
- Copies/scans not clear, but originals are
- Improper items in image
  - Earrings not removed
  - Tongue rings present
- Poor angulation of image
- Landmarks not clearly visible
- Landmarks misidentified in ceph



# Common Case Problems

Poor photographs

- Poorly exposed
- Poorly focused
- Bad coloration/color casts
- Not composed correctly
  - Patient not looking STRAIGHT AHEAD
  - Has eyeglasses on
  - Eyes closed
  - Shoulders not visible
  - Image crooked or not level
- Missing required images

# Common Case Problems

Poor quality study models

- Rough, not finished cleanly
- Bad impression
- Improper size, not within IBO standards
- Not marked with date or doctors ID
- Digital printout not clear
- Digital printout not labeled correctly

# Caseworx

CANDIDATE



# What Benefits? Why?

- Why build a digital case?
- How does it help?
- Where does it all fit in?
- What does it do for me?!

# Benefit – Singular Data Fielding

- One thought, one answer
- Saves each item separately
- Easy to spot missing items

The screenshot displays a digital medical history form with three distinct sections, each separated by a horizontal line and a small gap. Each section consists of a title bar, a description of the field, and a text area containing patient data.

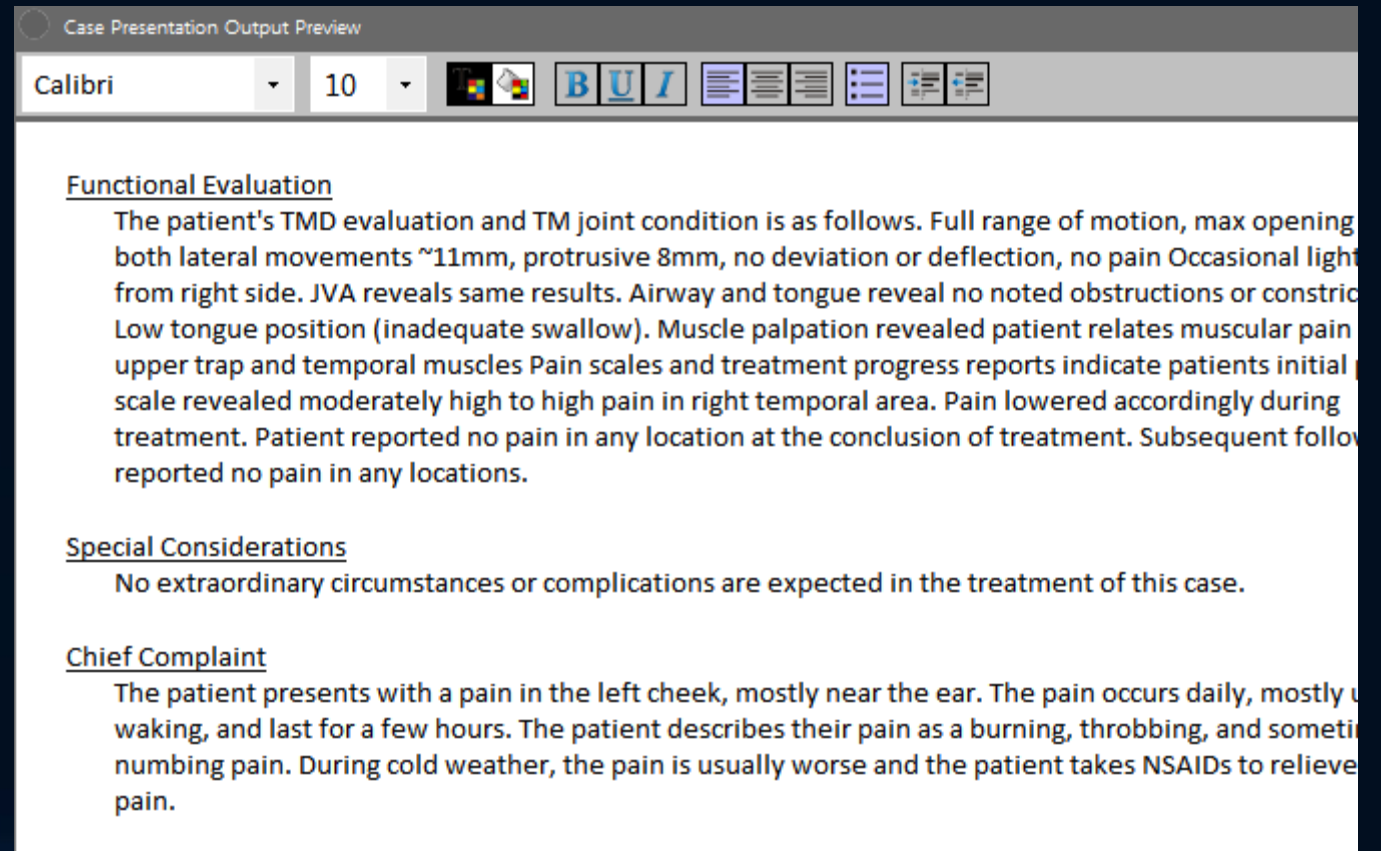
- Medical History**  
Describe patient's medical history, including allergies, current medications & treatments, family disease history  
The patient has a history of high blood pressure and constant tinnitus with an active allergy to metals, specifically nickel, and takes NSAIDS almost every day for headaches. Most members of the patient's family has a history of HBP
- Accident / Causative History**  
Describe details if the complaint is related to a work or vehicular accident, specific injury/cause, or 'not related'  
This patient's complaint was not related to an accident, either at work or of vehicular nature.
- Physical Examination**  
Indicate details of patient's physical exam, such as demeanor, head posture, gait, balance, etc.  
The patient is in good physical condition, with a smooth gait, decent balance and head posture WNL. The patient has no slurring and their hearing is WNL. According to the patient, the only time their hearing is affected is when a ringing

The bottom of the form shows the start of a fourth section: **Dental History / Intraoral Examination**.



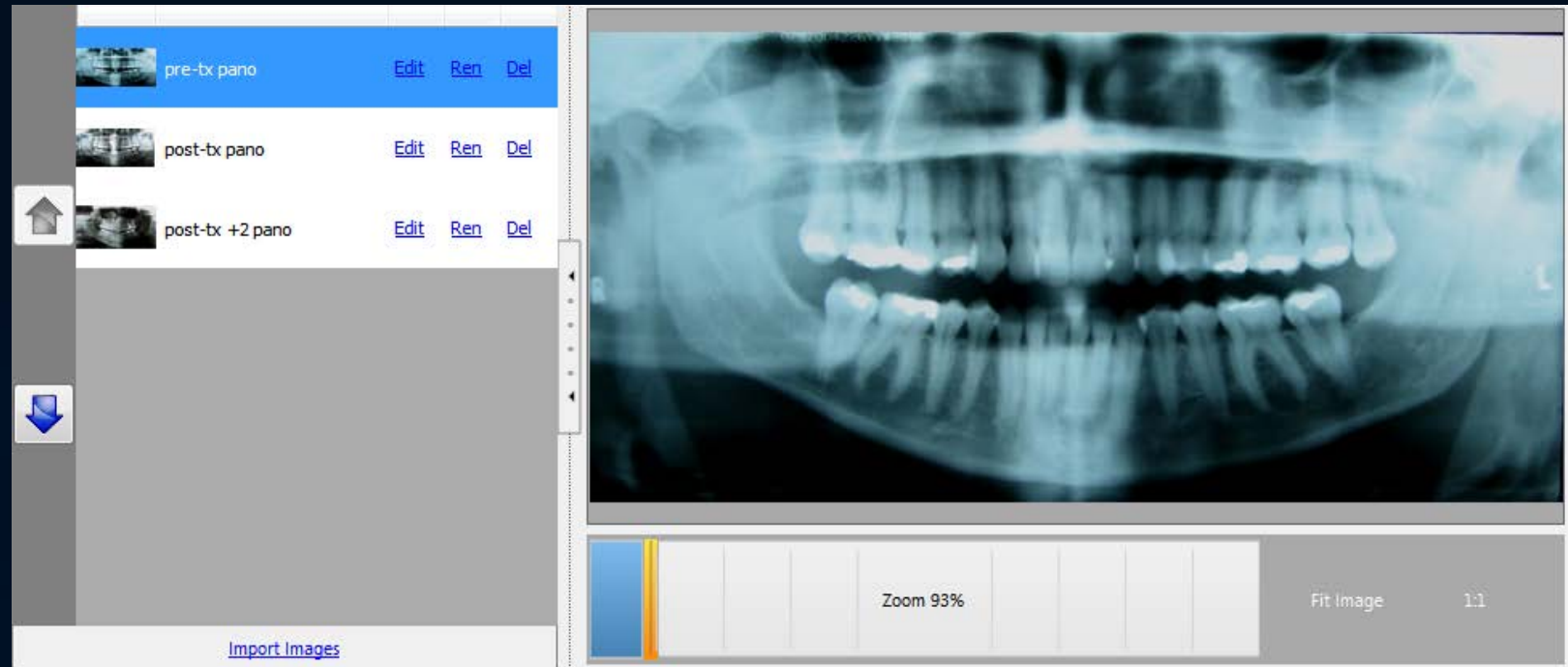
# Benefit – Auto Output Formatting

- Properly orders items
- Saved separately from data
- Can be manually edited
- Can be exported to Microsoft Word



# Benefit – Digital Imaging Storage

- Saved with case
- Labeled and ordered
- WSYIWYG for examiner



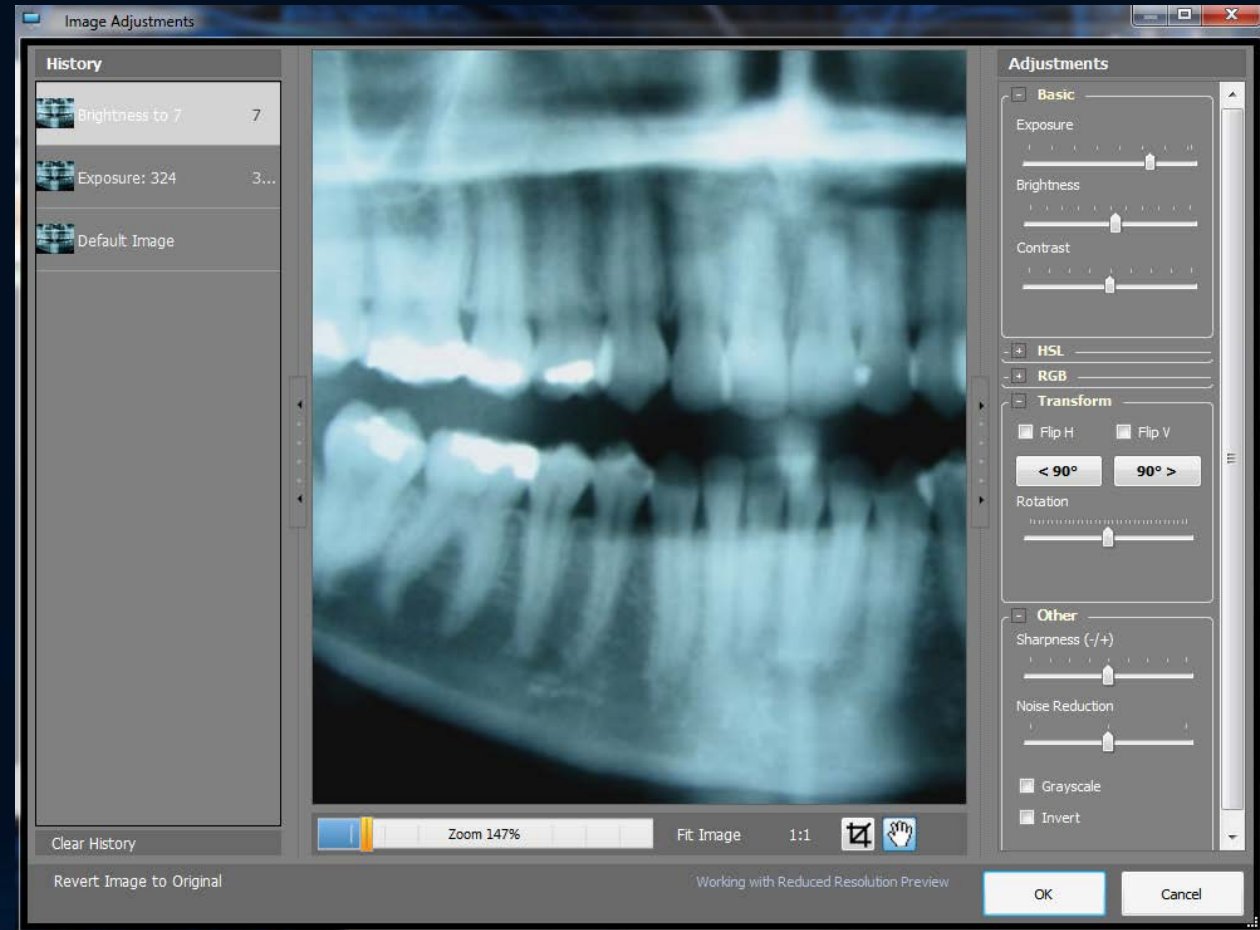
# Benefit – Digital Photo Grids

- Saved with case
- Labeled and ordered
- Grid auto-generated



# Benefit – Built-in Image Editing

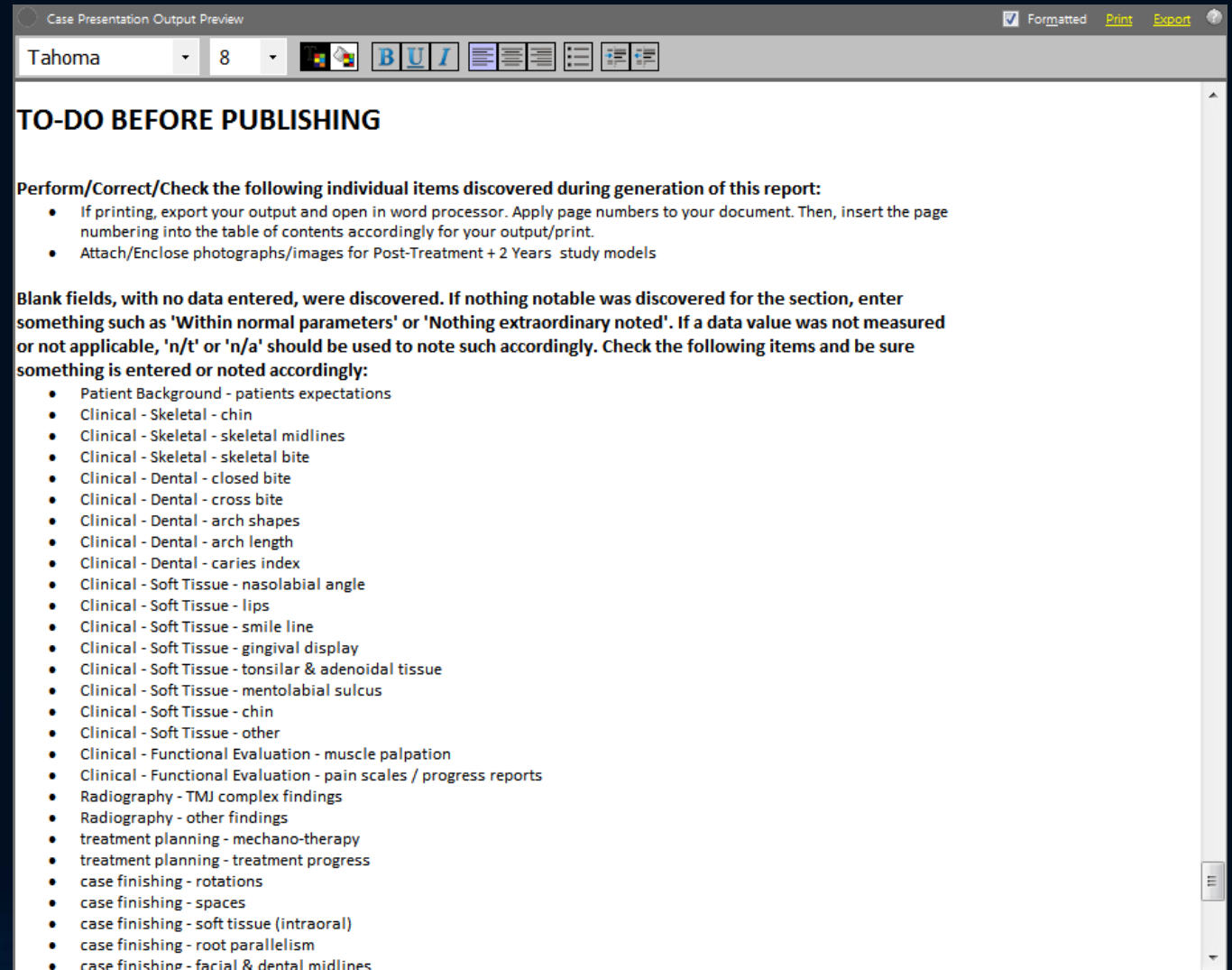
- Non-destructive
- Cropping, exposure, color cast removal
- Maintains change history





# Benefit – To-Do List

- Shows missed fields
- Auto-generated when refreshing output
- Reminds of things to do before submitting case

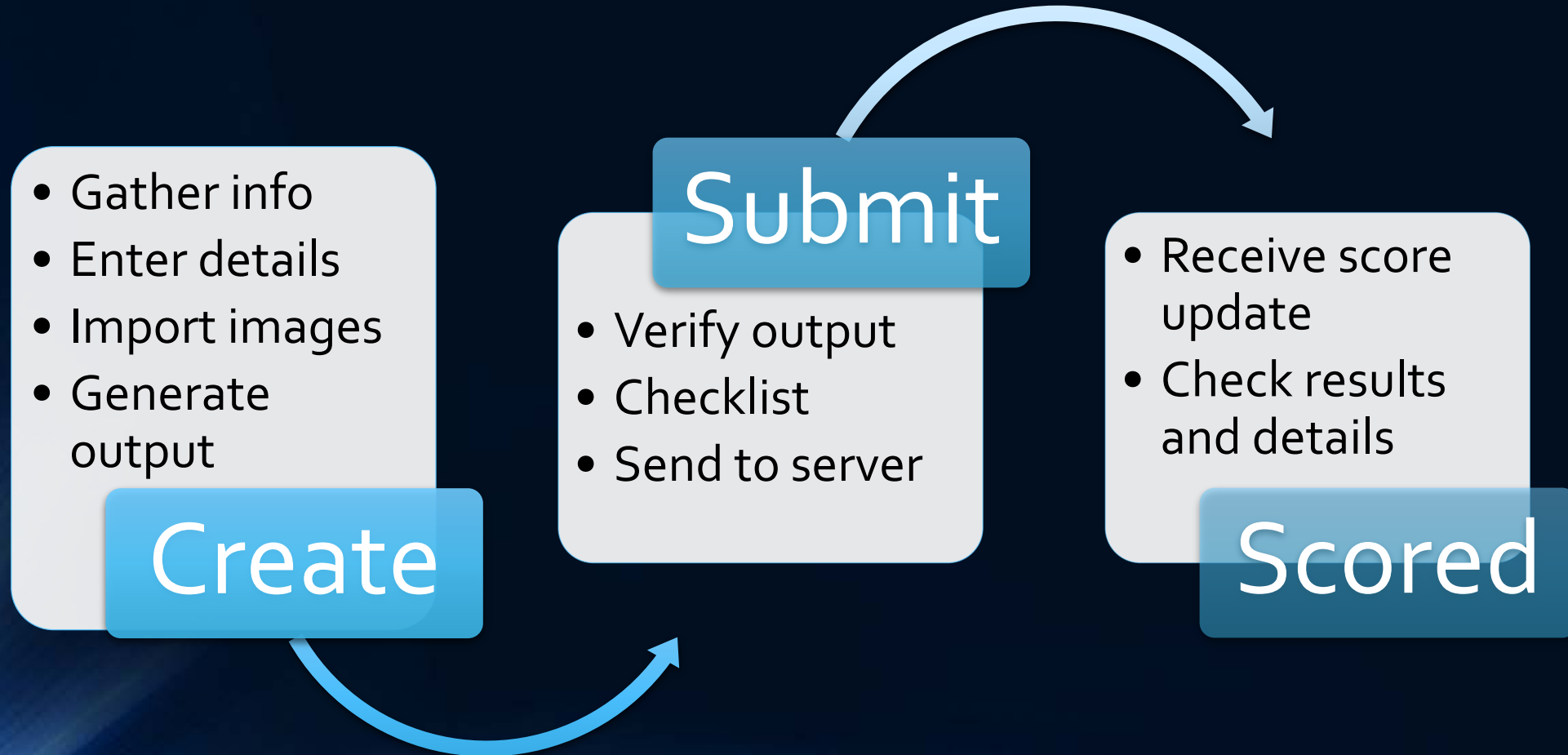




# Benefit – Learn to Collect Proper Documentation

- Covers medical necessity for treatment
- Provides legal documentation
- Consistent, predictable documentation between all cases
- Great exercise for daily practice

# Candidate Case Process



# Caseworx





INSTALLATION



# Getting Caseworx Package

- Download directly from [jklsoftware.com](http://jklsoftware.com)
  - Choose Products -> Caseworx ([jklsoftware.com/caseworx](http://jklsoftware.com/caseworx))
  - Free for all IAO members

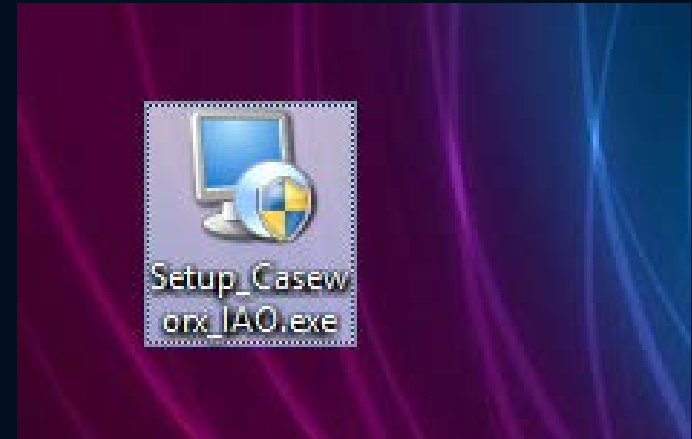
## Downloads

-  Download the installer package
-  Download the User's Guide
-  Download the Preview Version Cleanup Tool
-  Download the Preview Version Cleanup Tool (ZIP Packaged)

- User manuals, Candidate's Handbook included with package
- Updates are directly checked and installed by the program on start

# Installing Caseworx Package

- Run package downloaded
- If computer needs updated, installer will inform and download updates directly from Microsoft website
- Cannot install without the updates installed
- May need reboot after install. Will notify if needed.





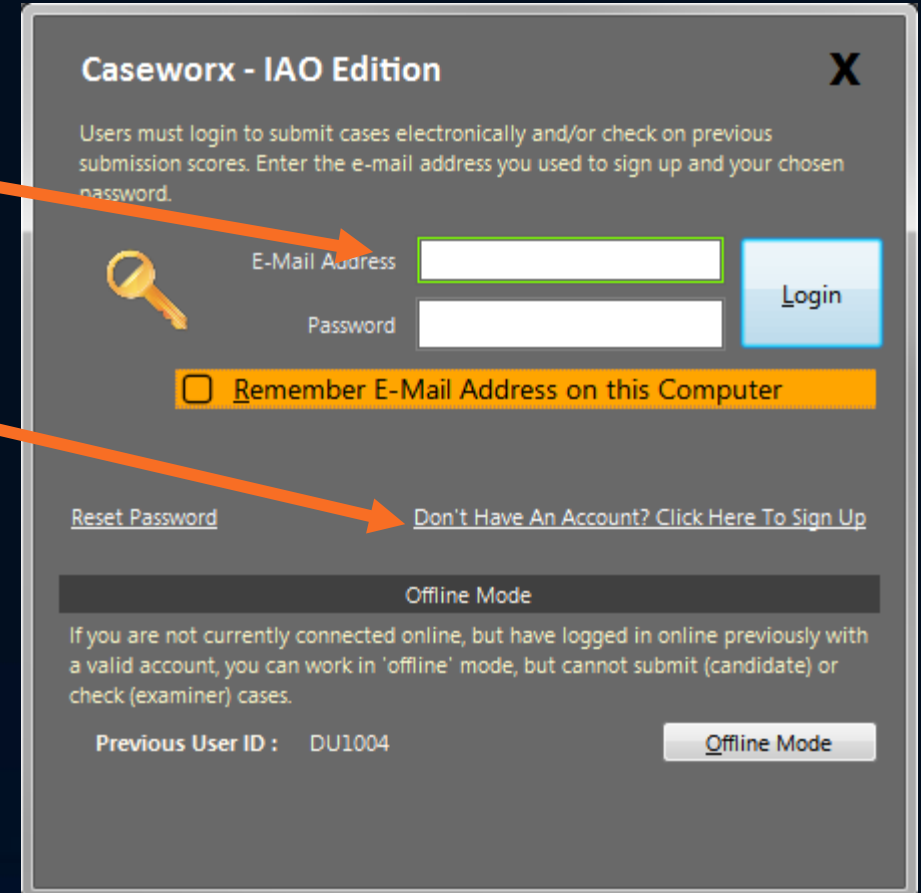
# Starting Caseworx on Your Computer

- Must have Internet connection on first start – checks for updates and create user account
- Double-click icon on desktop or start from Start Menu (JKL Software -> Caseworx)




# Creating User Account / Logging In

- Enter e-mail and password to login, if you have an account already
- Create account by clicking on “Don’t Have An Account? Click Here To Sign Up” link



**Caseworx - IAO Edition** X

Users must login to submit cases electronically and/or check on previous submission scores. Enter the e-mail address you used to sign up and your chosen password.

 E-Mail Address

Password

☐ Remember E-Mail Address on this Computer

[Reset Password](#) [Don't Have An Account? Click Here To Sign Up](#)

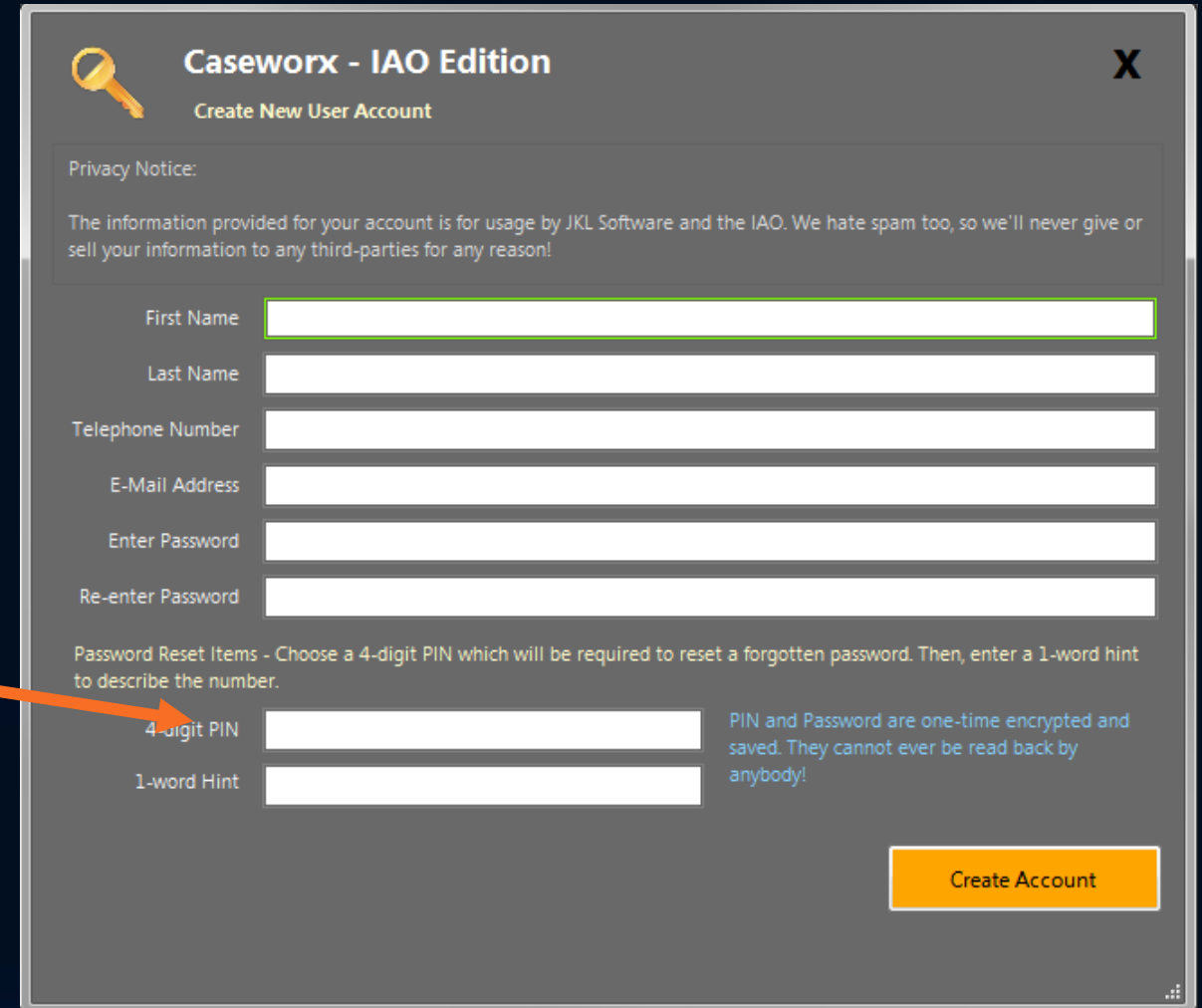
**Offline Mode**

If you are not currently connected online, but have logged in online previously with a valid account, you can work in 'offline' mode, but cannot submit (candidate) or check (examiner) cases.

Previous User ID : DU1004 Offline Mode

# Creating User Account

- Enter information to create account
- E-mail address used to identify
- PIN and hint used to reset password
  - Passwords are “hashed”, not stored
  - Cannot be decrypted



**Caseworx - IAO Edition**  
Create New User Account

Privacy Notice:  
The information provided for your account is for usage by JKL Software and the IAO. We hate spam too, so we'll never give or sell your information to any third-parties for any reason!

First Name

Last Name

Telephone Number

E-Mail Address

Enter Password

Re-enter Password

Password Reset Items - Choose a 4-digit PIN which will be required to reset a forgotten password. Then, enter a 1-word hint to describe the number.

4-digit PIN

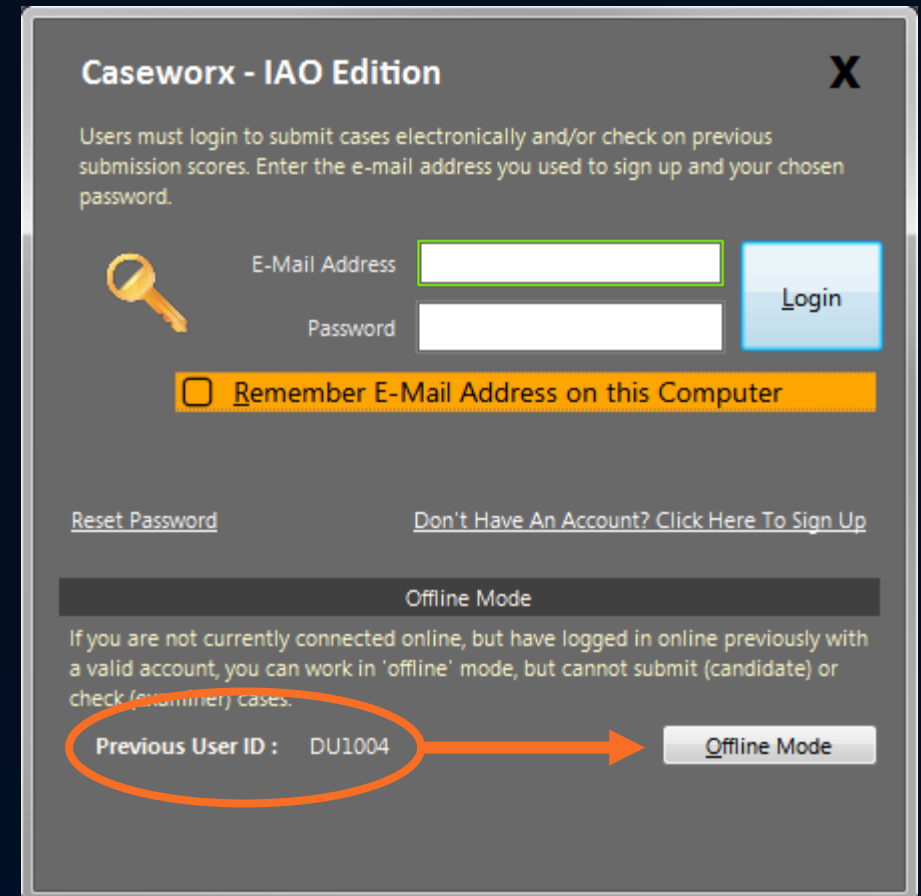
1-word Hint

PIN and Password are one-time encrypted and saved. They cannot ever be read back by anybody!

Create Account


# Working “Offline”

- Allows for cases to be built and worked on without active Internet connection
- Once an account created and logged in once (system will remember the last user that logged in)
- Doesn't check submitted cases and score updates
- Can login at any time to go “online”



**Caseworx - IAO Edition** X

Users must login to submit cases electronically and/or check on previous submission scores. Enter the e-mail address you used to sign up and your chosen password.

 E-Mail Address


Password

☐ Remember E-Mail Address on this Computer

[Reset Password](#) [Don't Have An Account? Click Here To Sign Up](#)

**Offline Mode**

If you are not currently connected online, but have logged in online previously with a valid account, you can work in 'offline' mode, but cannot submit (candidate) or check (examiner) cases.

Previous User ID : DU1004 

[Offline Mode](#)

# Common Issues

## ISSUE/SYMPTOM

- Program acts weird
- Gets "Access Denied" messages
- Images may not save or delete correctly

## CAUSE / SOLUTION

- Local Windows user account does not have enough permissions
- Change Windows user account to "Administrator"



# Common Issues

## ISSUE/SYMPTOM

- Text seems too large or cut off in program
- Proportions of text odd or off
- Most prominent in MacOS installed Parallels or Vmware with "Retina Display" hardware

## CAUSE / SOLUTION

- Windows client is configured for "Custom Text Size" greater than 100% or to odd proportion
- Change or reduce the Windows "Screen DPI" or "Custom Text Size"

# Common Issues

## ISSUE/SYMPTOM

- Submitting packages or updating scores seem to take a long time, never complete, or hang the program

## CAUSE / SOLUTION

- Poor or inconsistent Internet connection
- Check Internet connection
  - If wireless, check signal strength
  - Avoid public Wifi points
  - Some cellular connections have high latency

# Common Issues

## ISSUE/SYMPTOM

- Program cannot install or update

## CAUSE / SOLUTION

- Windows permissions too restrictive or missing "Administrator" permission
- Windows User Access Control (UAC) pop-up authorization window was answered "No" when asking for permission to install or update program

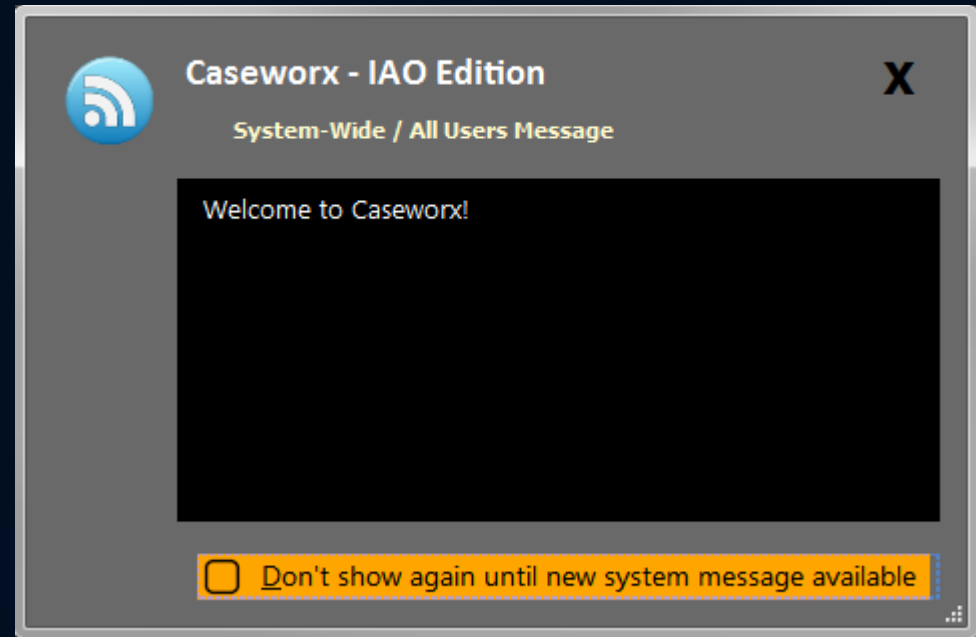
# Caseworx

NAVIGATION



# System Message

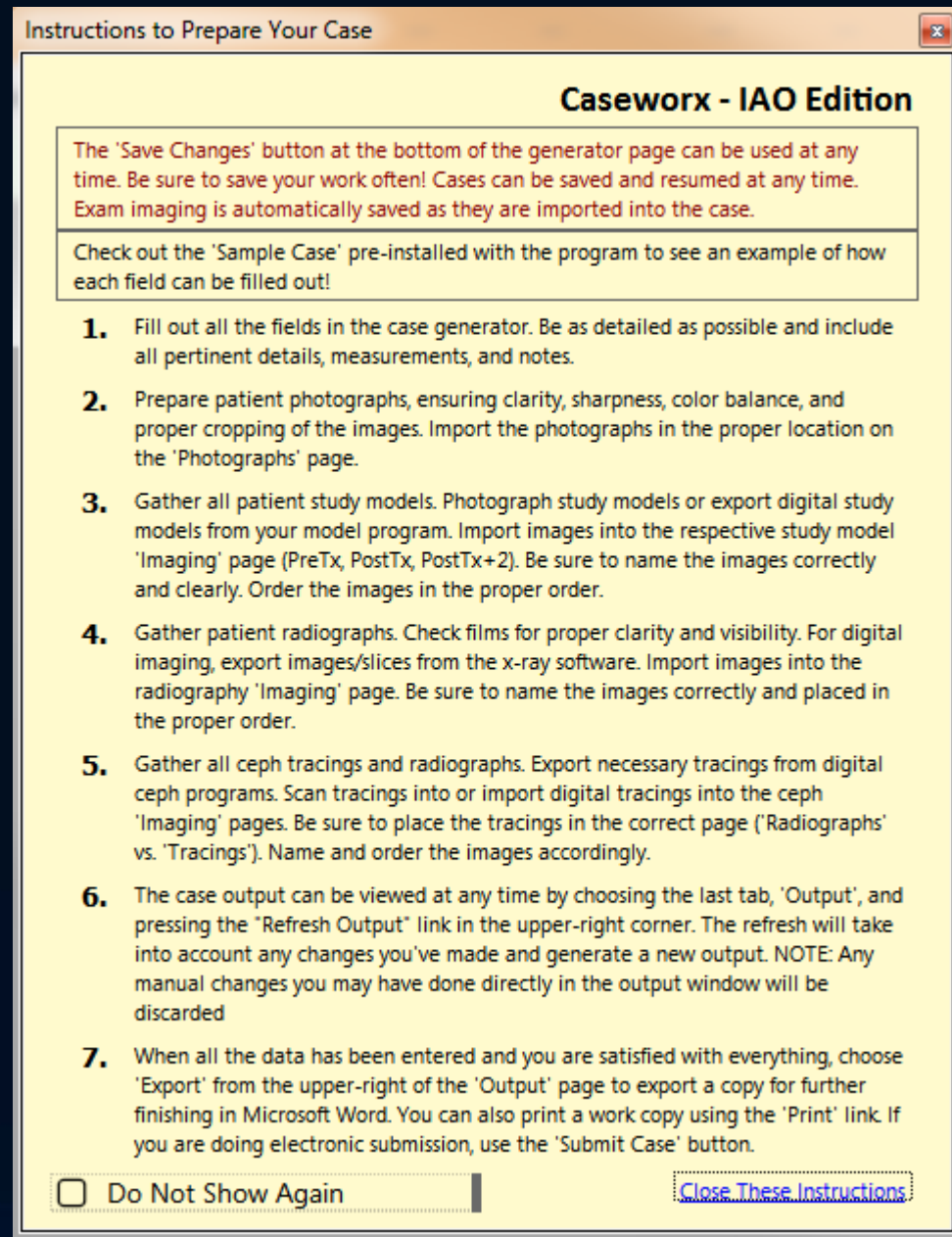
- Shown once on program startup
- Announces system-wide messages
  - System maintenance
  - Major updates, fixes, changes
- Can be hidden until message changes





# On-Screen Instructions

- Shows quick list of case creation and submission process tasks
- Can be hidden and shown via the "Help" -> "Show Instructions" menu item in main screen
- More detailed instructions while working available in each section



# Main Screen “Home Page”

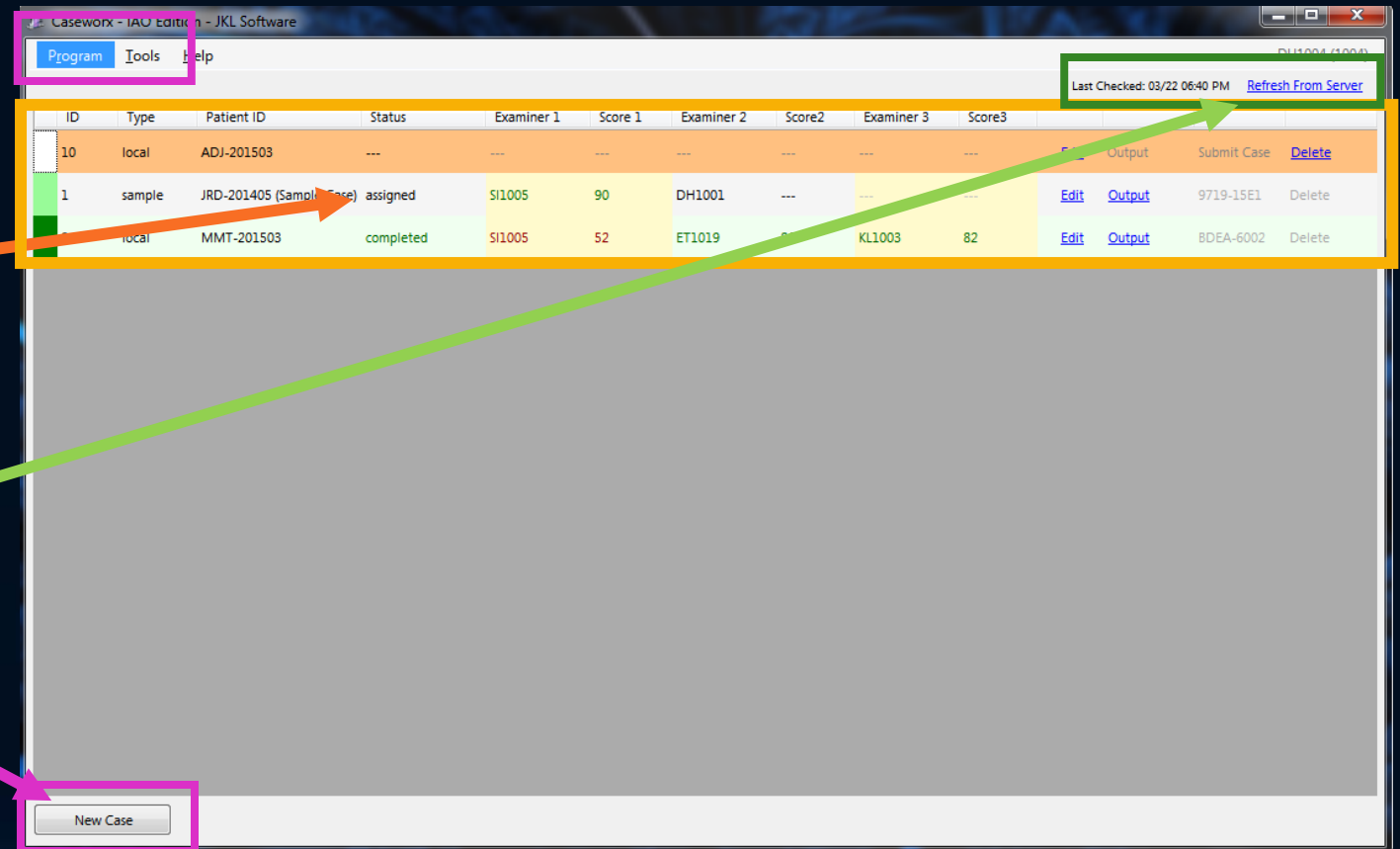
- Everything starts and ends on the Home Page

- Shows case status and scoring if online

- Auto-updates every 15 minutes if online, manual at any time

- Starts “New Case”

- Can also start from “Program” menu



# Main Screen “Home Page”

| ID | Type   | Patient ID               | Status    | Examiner 1 | Score 1 | Examiner 2 | Score2 | Examiner 3 | Score3 |                      |                        |             |                        |
|----|--------|--------------------------|-----------|------------|---------|------------|--------|------------|--------|----------------------|------------------------|-------------|------------------------|
| 10 | local  | ADJ-201503               | ---       | ---        | ---     | ---        | ---    | ---        | ---    | <a href="#">Edit</a> | Output                 | Submit Case | <a href="#">Delete</a> |
| 1  | sample | JRD-201405 (Sample Case) | assigned  | SI1005     | 90      | DH1001     | ---    | ---        | ---    | <a href="#">Edit</a> | <a href="#">Output</a> | 9719-15E1   | Delete                 |
| 9  | local  | MMT-201503               | completed | SI1005     | 52      | ET1019     | 86     | KL1003     | 82     | <a href="#">Edit</a> | <a href="#">Output</a> | BDEA-6002   | Delete                 |

- Case Type and Anonymous ID

- Case Status

- Assigned = submitted, in process of scoring
- Holding = examiner hold
- Completed = scoring completed

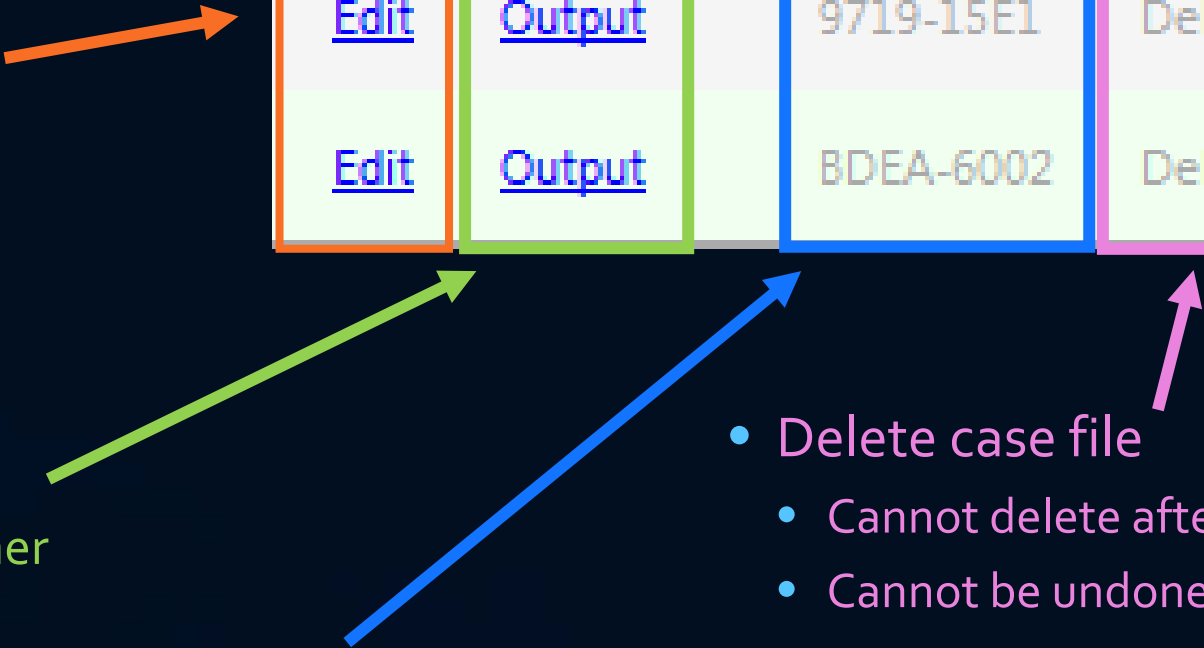
- Examiner assignments and final scores

- Functions and validations

# Case Functions

- Case and output editor
  - Data editor
  - Image editor
  - Output editor

- Output Viewer
  - Shows exactly what examiner will see
  - Also shows detailed score returns
  - Greyed out if no output saved



The diagram shows a grid of buttons for case management. An orange arrow points to the 'Edit' button in the first column. A green arrow points to the 'Output' button in the second column. A blue arrow points to the 'Submit Case' button in the third column. A pink arrow points to the 'Delete' button in the fourth column. The grid contains two rows of data: '9719-15E1' and 'BDEA-6002'.

| <u>Edit</u> | Output        |  | Submit Case | <u>Delete</u> |
|-------------|---------------|--|-------------|---------------|
| <u>Edit</u> | <u>Output</u> |  | 9719-15E1   | Delete        |
| <u>Edit</u> | <u>Output</u> |  | BDEA-6002   | Delete        |

- Delete case file
  - Cannot delete after submission
  - Cannot be undone once deleted
- Submit/Resubmit case when ready
  - Shows validation code after submission
  - Greyed out if no output saved



# Caseworx

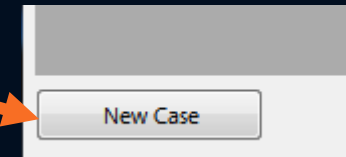
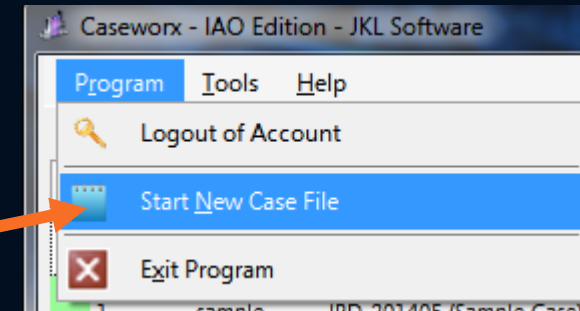
CASE EDITOR







# New Case Record

- Started from Program menu
- Also can be started from “New Case” button at lower-left of Home Page



# New Case Record

- Generation assistant helps create consistent, unique case ID
- Fellow or diplomate case choice
- Fill out the info and press "Start New Case"
- Preloads the case Editor with information and prepares file for generation

**Caseworx - IAO Edition**  
Case Name Generation Assistant

Cases should maintain strict anonymity and present the general viewer no details to who the patient actually is. However, as the presenter preparing the case, it is also important that you are able to differentiate your cases.

This unique 'patient id/name', in conjunction with your doctor's id code, is all the examiner will know about the case. Therefore, it is equally important that the case name is meaningful.

Enter the real name information for your patient below and the program will generate a unique "patient name" for your case.


Presenter's (your) ID : DU1004


Case Level :

Patient's Real First Name :

Patient's Real Middle Initial :

Patient's Real Last Name :

Patient's Birthdate :  

Treatment Start Date :  

Case Type (class/division) :

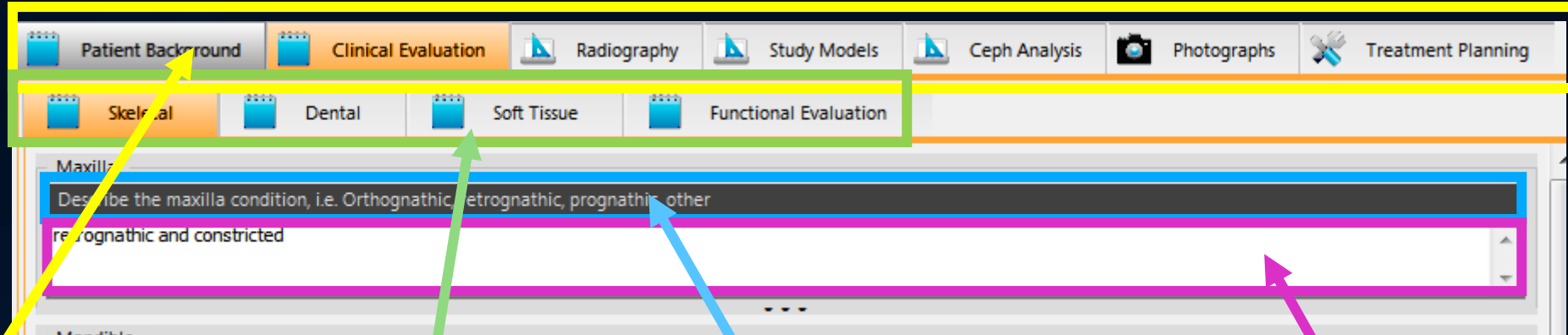
Informed Consent by Patient or Guardian to Use Case Data : ☐ Consent Approved and on File

# Case Generation Assistant "Editor"

- Cases created/edited on this screen
- Organized in logical sections
- Each section contains individual boxes to enter data
- Item boxes can be expanded to view more data without scrolling
- Data changes can be saved (or discarded) at any time

The screenshot displays the 'Case Generation Assistant - IAO Edition' software interface. The title bar indicates the current case is 'JRD-201405 (Sample Case)'. The main window features a top navigation bar with tabs for 'Finishing & Results', 'Output', 'Patient Background', 'Clinical Evaluation', 'Radiography', 'Study Models', 'Ceph Analysis', 'Photographs', and 'Treatment Planning'. The 'Patient Background' tab is active, showing a form with the following fields: 'Case ID Number' (1), 'Patient's Identifier\*' (JRD-201405 (Sample Case)), 'Patient Start Age' (18), 'Presenter' (DH1001), 'Patient Birthdate' (12 / 02 / 1995), and 'Patient Current Age' (19). A yellow warning message states: '\* Strict anonymity should be maintained. Assign a unique identifier such as patient's initials with date is recommended.' Below this, the 'Case Type/Description (also used by Title Page to establish case title)' field contains 'class II, division I'. The 'Medical History' section is highlighted with a green box and contains a text area with the following text: 'Describe patient's medical history, including allergies, current medications & treatments, family disease history. The patient has a history of high blood pressure and constant tinnitus with an active allergy to metals, specifically nickel. The patient has been on blood pressure medication, vitamins B-12 and C, and takes NSAIDs almost every day for headaches. Most members of the patient's family has a history of HBP and GI conditions.' The 'Accident / Causative History' section is highlighted with a blue box and contains a text area with the following text: 'Describe details if the complaint is related to a work or vehicular accident, specific injury/causation. This patient's complaint was not related to an accident, either at work or of vehicular nature.' The 'Physical Examination' section is highlighted with a blue box and contains a text area with the following text: 'Indicate details of patient's physical exam, such as demeanor, head posture, gait, balance, etc. The patient is in good physical condition, with a smooth gait, decent balance and head posture WNL. The patient is coherent and understands well. Their speech is well articulated with no slurring and their hearing is WNL. According to the patient, the only time their hearing is affected is when a ringing in their right ear is occurring.' The 'Dental History / Intraoral Examination' section is highlighted with a blue box and contains a text area with the following text: 'Describe patient's dental history, including previous work, missing teeth, fillings, crowns, etc. The patient's dental history is not well documented, as they have had numerous dentists. Visual examination reveals that 1, 14, 15, 32 are missing and amalgam fillings are present in multiple locations. No periodontal concerns.' The 'Chief Complaint and Details (E & M)' section is highlighted with a blue box and contains a text area with the following text: 'Describe the patient's chief complaint, including location, length of occurrence, prevalence of occurrence, pain qualities, mitigating/aggravating factors, etc. Be sure that this written account describes the patient's needs and complaints about their teeth, smile, and oral health. The patient presents with a pain in the left cheek, mostly near the ear. The pain occurs daily, mostly upon waking, and last for a few hours. The patient describes their pain as a burning, throbbing, and sometimes sharp pain. During cold weather, the pain is usually worse and the patient takes NSAIDs to relieve the pain.' At the bottom right, there are three buttons: 'Save Output', 'Save Changes', and 'Discard Changes', which are highlighted with a pink box. An orange arrow points from the first bullet point to the top navigation bar. A green arrow points from the second bullet point to the 'Medical History' section. A blue arrow points from the third bullet point to the 'Physical Examination' section. A pink arrow points from the fifth bullet point to the 'Save Changes' button.

# Data Sections



- Main section choice

- Item instruction and description

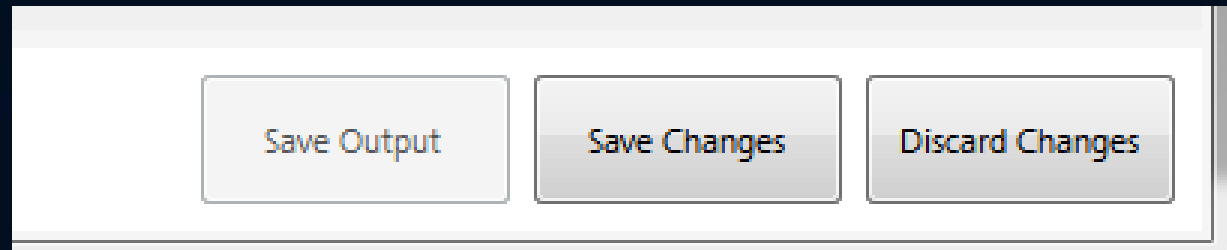
- Subsection

- Helps organize thoughts better
- May separate data from imaging panel

- Item data and details

# Saving Data

- Enables when changes detected in data
- Can save or discard (returns to last saved data)
- Images always saved immediately
- “Save Output” on enables when Output has been edited or re-generated
- Can save at any time
  - “Save often”





# Imaging Sections

- Image List and Functions

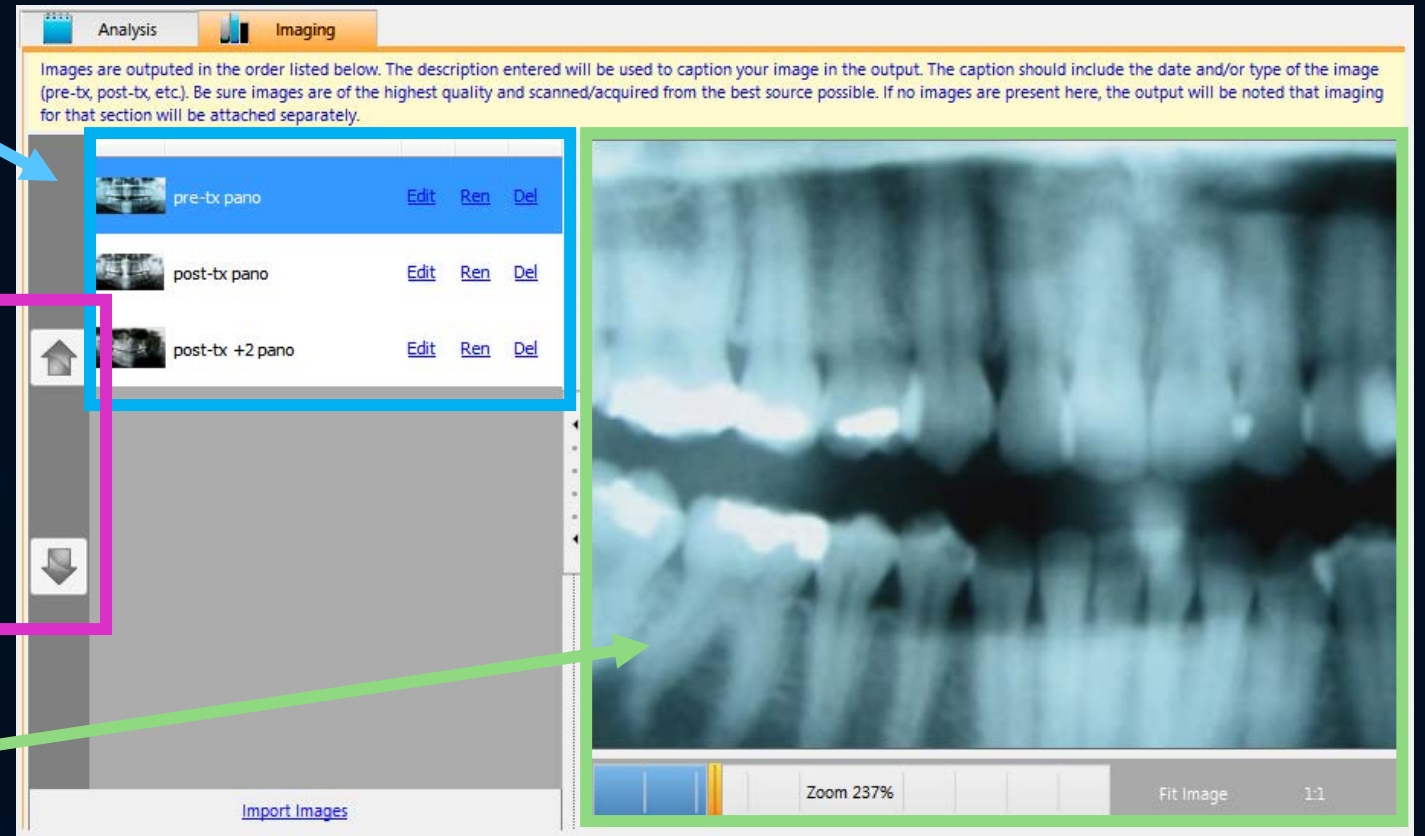
- Name image appropriately
- “Edit” to open image editor

- Image Ordering

- Images output in order listed
- Use arrows to move up/down

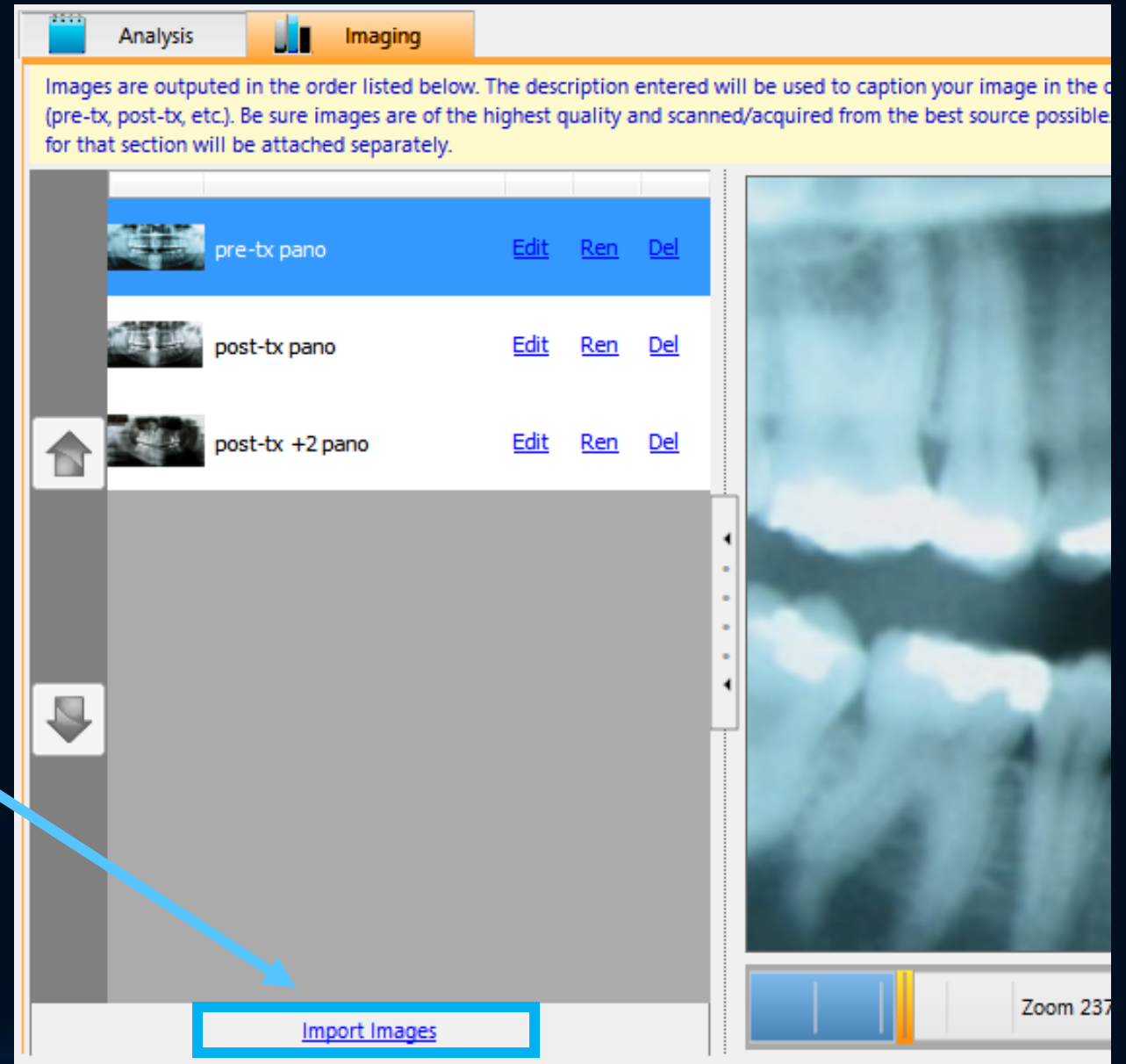
- Viewport and View Controls

- Zoom image to view details
- Click on image and drag to move



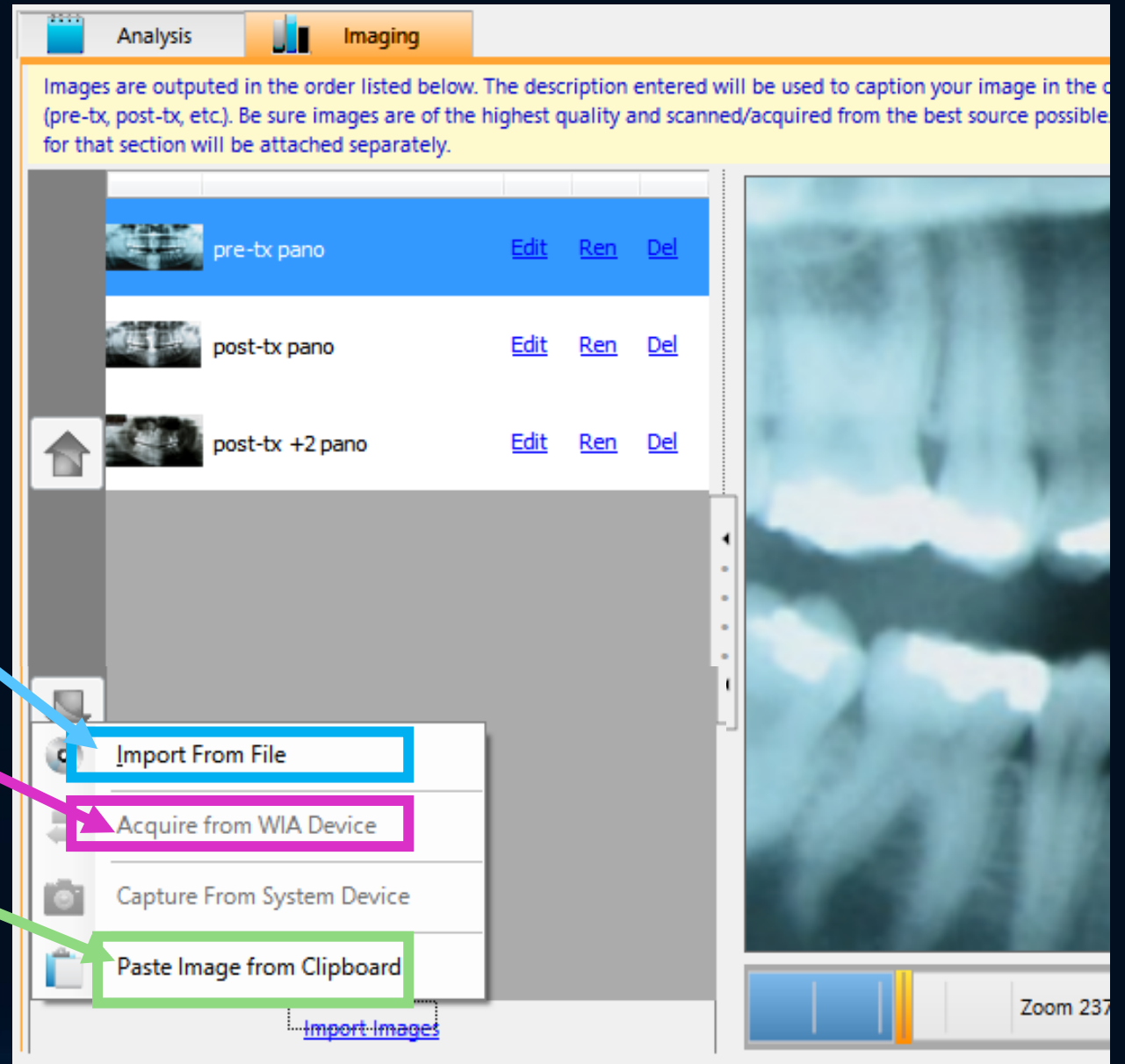
# Imaging Sections

- Import images
  - Click 'Import Images' link at bottom of each list
  - If scanning, be sure scanner is on and ready before clicking
  - Images saved immediately



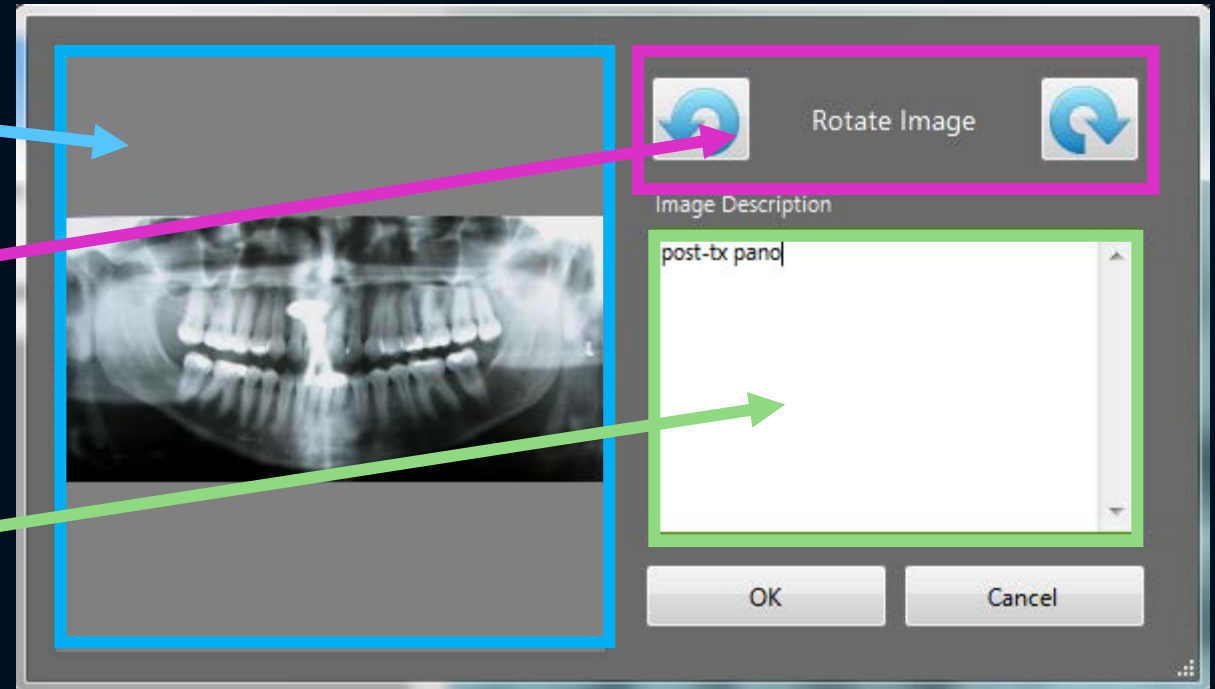
# Imaging Sections

- Import from File
  - Reads jpg, png, bmp, tiff
- Scan from WIA scanner
  - Enables if scanner found
- Paste from Clipboard
  - Allows any image that can be copied to the clipboard to be used



# Image Importing – Import Detail

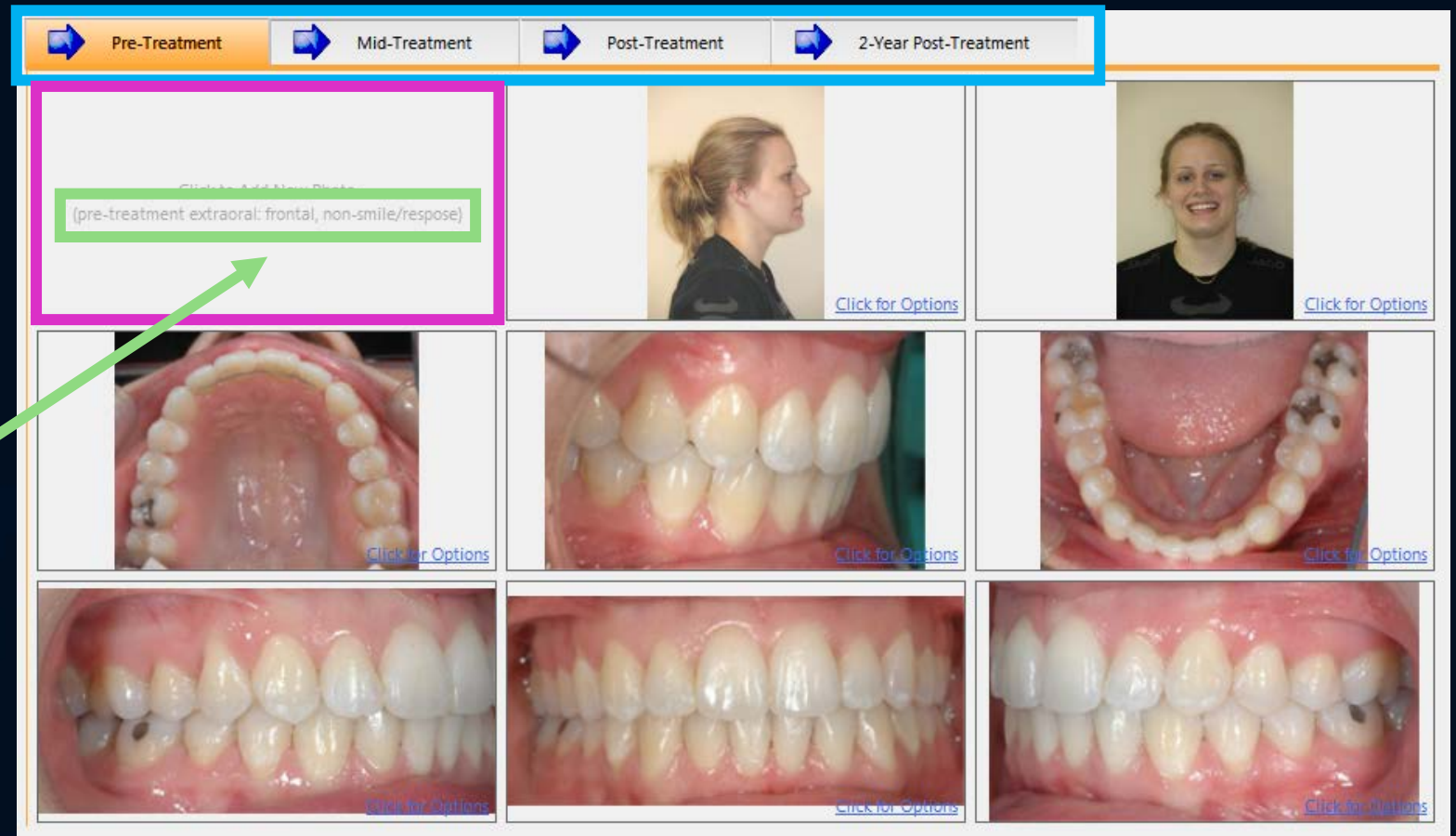
- Image Preview
- Quick Rotation
  - Detail rotation in image editor
- Image Description
  - Used in output to describe the image





# Photo Grids

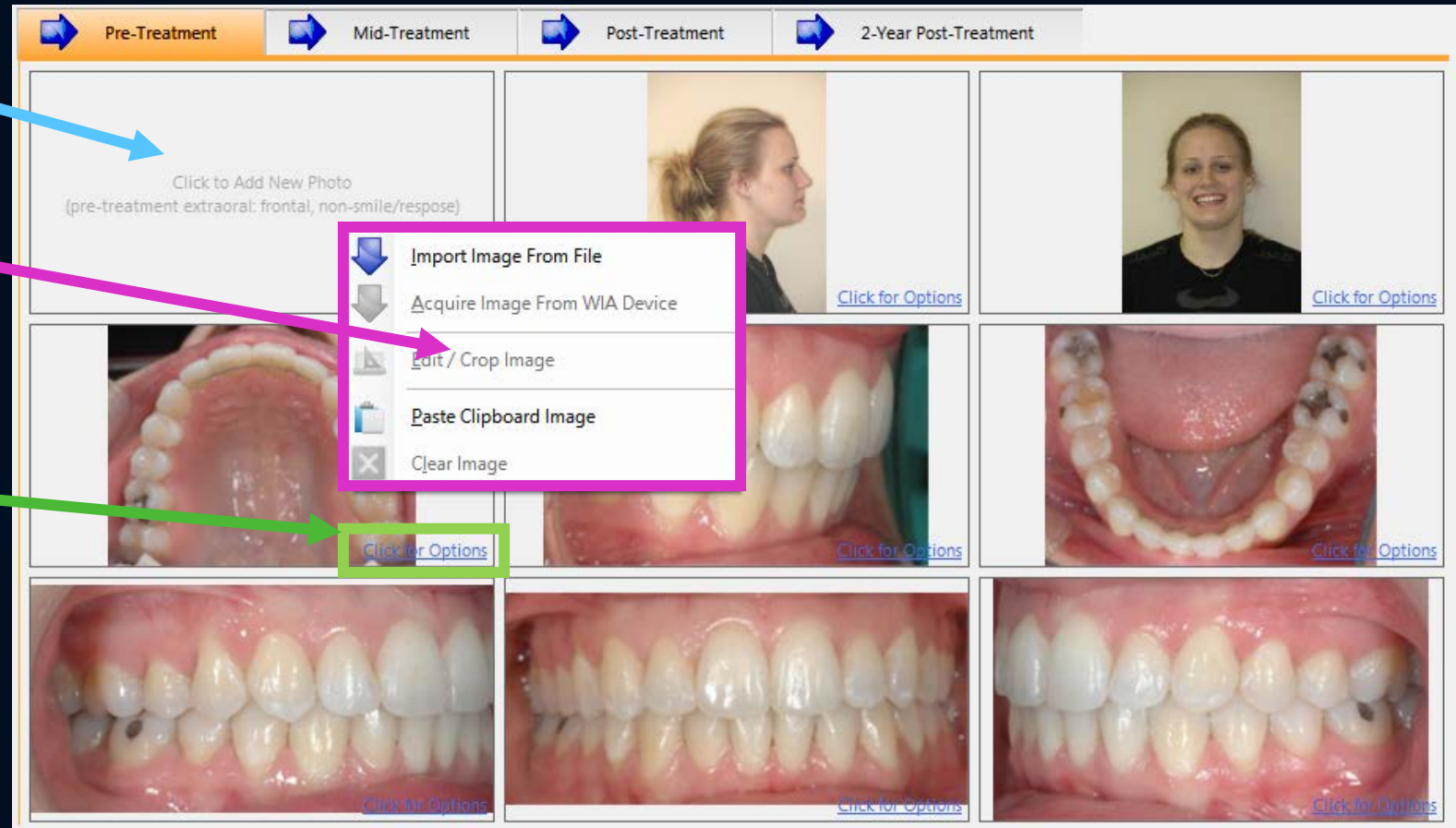
- Grid Selection
- Empty Cell
  - Click to get import menu
- Cell Description
  - Describes image that belongs in cell





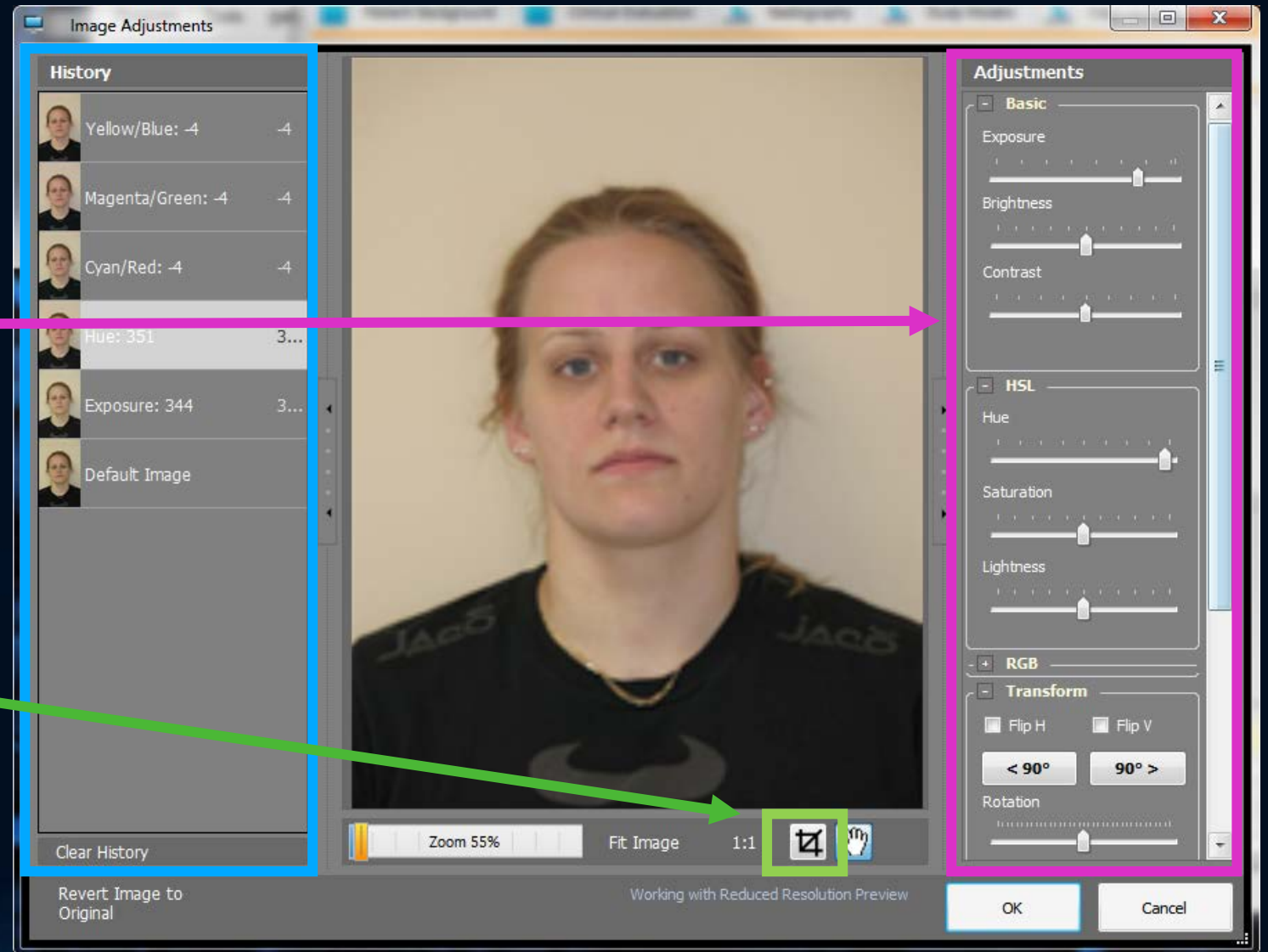
# Photo Grids

- Click in cell for menu
- Import Menu
  - From file, scanner, or clipboard
- Edit Menu
  - Click in cell with an image for replace, clear, edit options
- Image changes saved immediately



# Image Editor

- Change History →
- Adjustment Tools
  - Exposure, contrast, hue, and rotation most commonly used tools
- Crop Tool →
- Can be re-edited or reverted at any time

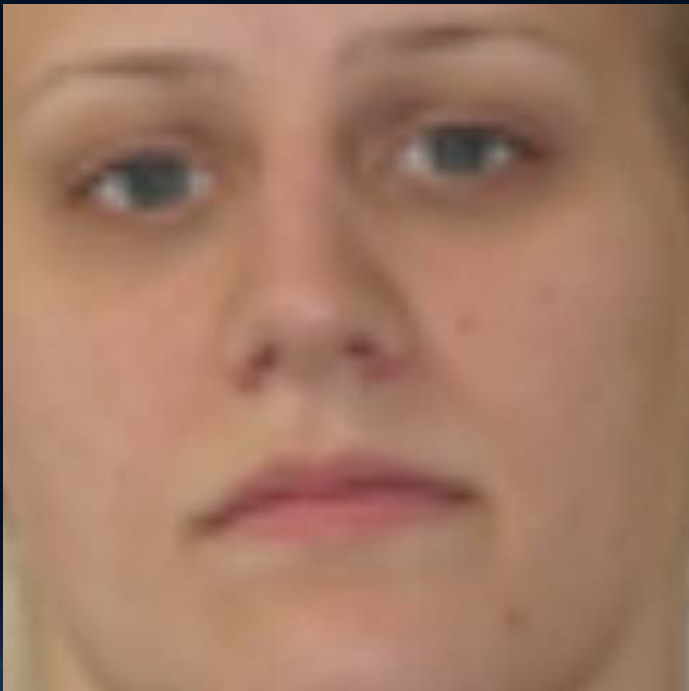


# Image Quality

- 8 megapixel is plenty, useable for up to a 24x36 print
- Large files cause many issues
  - Long upload times for candidate, long download times for examiner
  - More resources to generate output, may result in out-of-memory condition
  - Large files show tiny flaws in image more, like camera shake
- Clarity, consistency, and quality hallmark of a good image
- Quality in = Quality out, cannot fix a poorly recorded image

# Image Editor Can't Fix Everything!

OUT OF FOCUS



SHARPENING DOESN'T WORK





# Image Editor Can't Fix Everything!

OVEREXPOSED / BLOWN OUT



DETAIL BEYOND REPAIR





# Image Editor Can't Fix Everything!

UNDEREXPOSED / BLOCKED UP

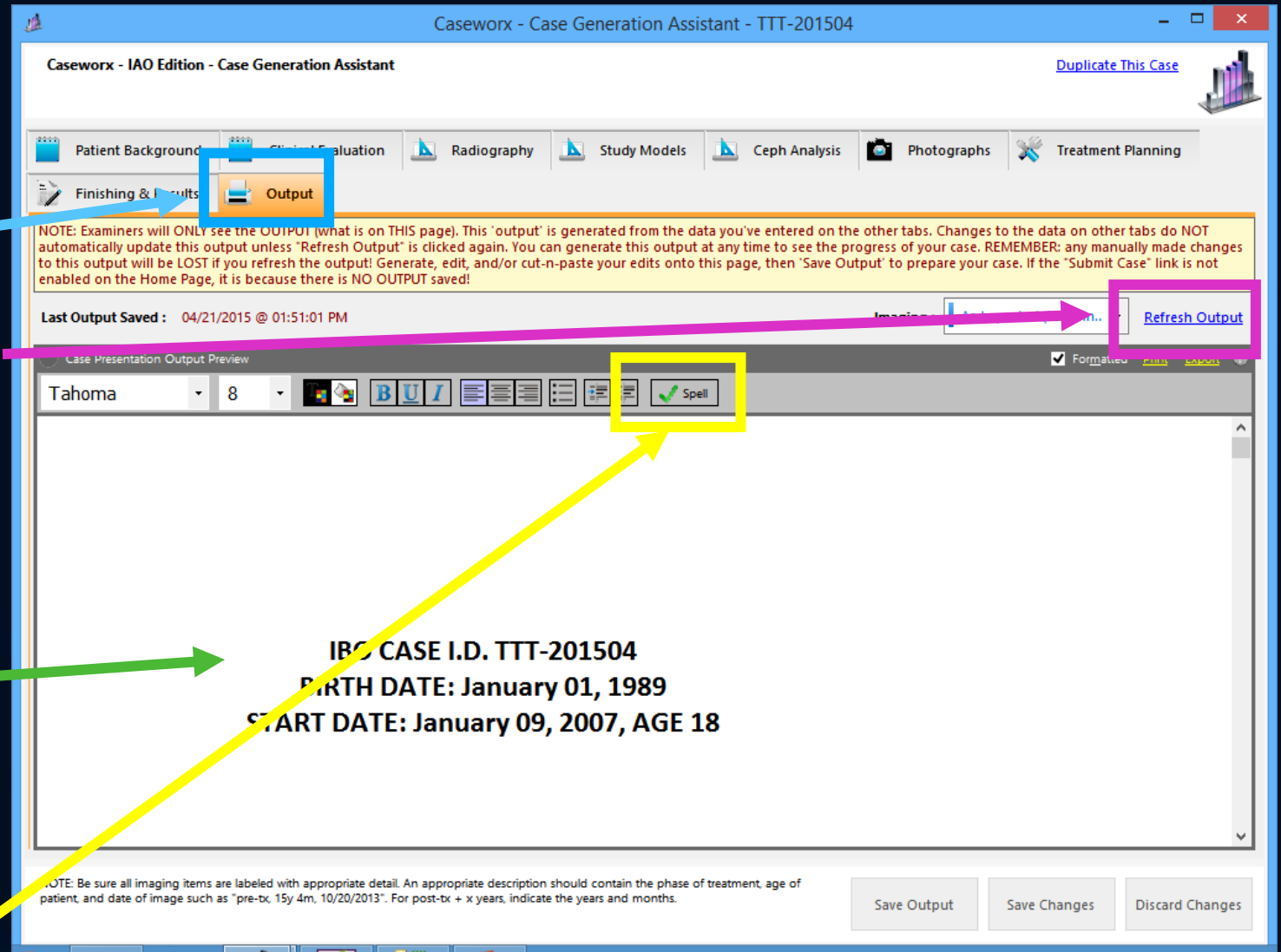


BRIGHTENING CAUSES NOISE  
AND BLOW OUT HIGHLIGHTS



# Generating Output Narrative

- Last section tab
- Click to generate output
  - Based on current data
  - Deletes any manual edits to previous generated output
- Output preview
  - Used to view generated narrative
  - Edit final output before submission
- Spell check!



# Generating Output Narrative

- To-do page automatically generated at refresh time
- Appears at bottom of narrative output
- Check and correct missing items
- Delete To-Do list before doing final save

The screenshot shows a software window titled "Case Presentation Output Preview". At the top, it says "Last Output Saved : 6/15/2014 @ 8:40:07 PM" and has a "Refresh Output" link. Below the title bar is a toolbar with a font dropdown set to "Calibri", a size dropdown set to "18", and various icons for text formatting (bold, italic, underline, etc.). The main content area is titled "TO-DO BEFORE PUBLISHING" and contains three sections of instructions with bulleted items:

- Perform/Correct/Check the following individual items discovered during generation of this report:**
  - If printing, export your output and open in word processor. Apply page numbers to your document. Then, insert the page numbering into the table of contents accordingly for your output/print.
  - Compile and attach all necessary (9) photographs for the Mid-Treatment series
  - Compile and attach all necessary (9) photographs for the Post-Treatment series
  - Compile and attach all necessary (9) photographs for the Post-Treatment + 2 years series
- Check document for quality and correctness**
  - Check spelling and punctuation of document. Typos and missing punctuation may cost points!
  - Check grammar of document. Poor grammar may cost points!
  - Number pages in document and update table of contents with page numbers (if printing)
- Check radiographs for labeling, clarity, and image quality. Include the following:**
  - A. Panoramic radiograph - Anatomic hard and soft tissue landmarks clearly visible
  - B. Full Mouth series ? Anatomic hard tissue landmarks clearly visible including all periapical areas (if used)
  - C. Occlusal Radiographs
  - D. Any other pertinent diagnostic images (tomo, SMV, etc.)

Below these sections, it says "Check cephalometric tracings for labeling, clarity, and completeness. Be sure ALL the following can be CLEARLY seen:" followed by a partially visible bullet point "A. Anatomic hard tissue landmarks". At the bottom right of the window are three buttons: "Save Output", "Save Changes", and "Discard Changes".

# Output Narrative - Hints

- **Avoid non-standard fonts: examiner may not have font installed on their system!**
  - Use "Arial", "Times New Roman", or "Calibri" to remain standard
- **Remember, manual edits to output lost when refreshing from data**
  - Best to change original source data field in appropriate section
  - However, can edit manually and add narrative detail before FINAL save and submission
- **Images fitted to page to best utilize paper orientation**
  - Examiner will be able to view image in detail. Be sure image is saved in correct orientation in respective imaging/photo section

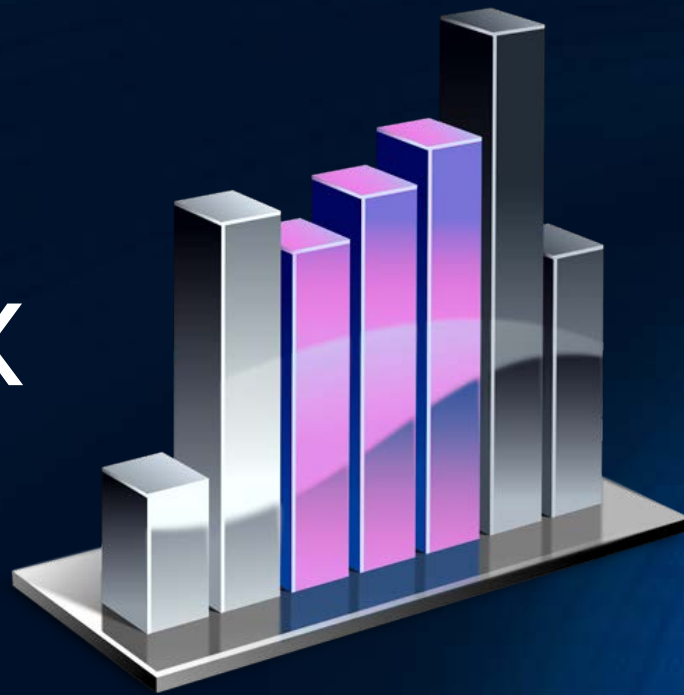
# Output Narrative - Hints

- No page numbering needed in table of contents
  - Digital submission documents don't have "paging"
- Copy/paste can also be utilized
  - Export document to Word document, perform further editing in Word
  - Return copy from Word to Output window
    - Ctrl-A in Word to "Select All", Ctrl-C to Copy to clipboard
    - Ctrl-A in Output window to select all, Delete, then Ctrl-V to paste into Output



# Caseworx

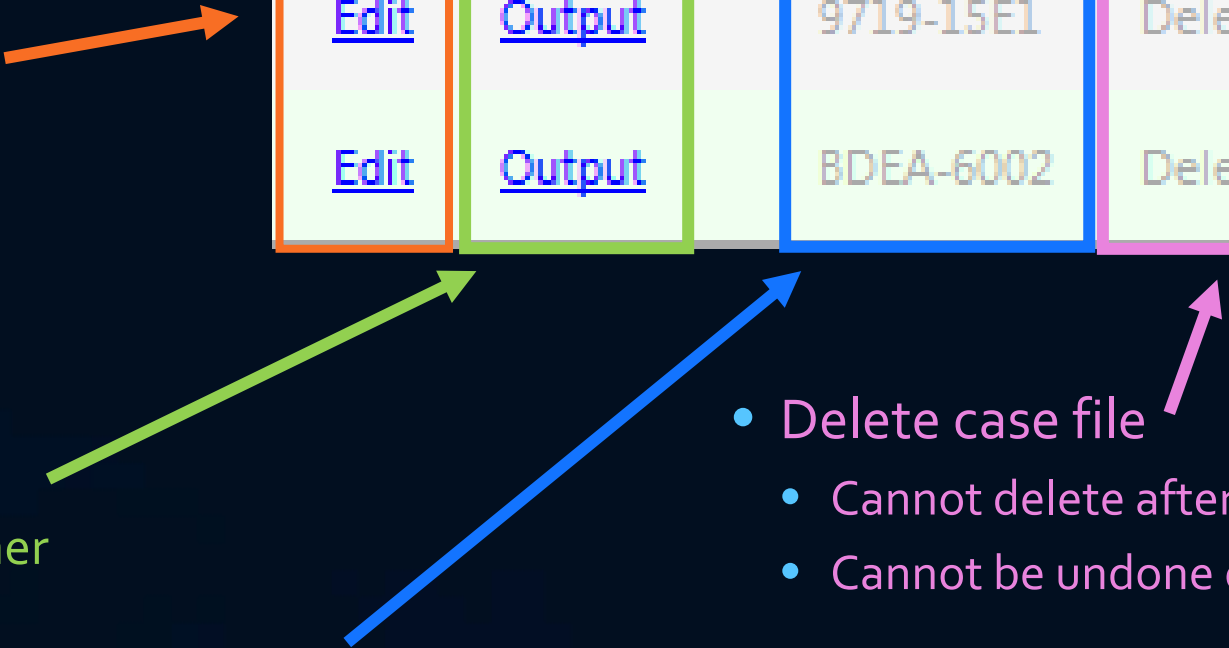
OUTPUT REVIEW



# Case Functions

- Case and output editor
  - Data editor
  - Image editor
  - Output editor

- Output Viewer
  - Shows exactly what examiner will see
  - Also shows detailed score returns
  - Greyed out if no output saved



The diagram shows a table with four columns: 'Edit', 'Output', 'Submit Case', and 'Delete'. Each column has three rows. The first row contains the column headers. The second and third rows contain the same text as the headers. An orange arrow points from the 'Case and output editor' bullet point to the 'Edit' column. A green arrow points from the 'Output Viewer' bullet point to the 'Output' column. A blue arrow points from the 'Submit/Resubmit case when ready' bullet point to the 'Submit Case' column. A pink arrow points from the 'Delete case file' bullet point to the 'Delete' column.

| <u>Edit</u> | Output        | Submit Case | <u>Delete</u> |
|-------------|---------------|-------------|---------------|
| <u>Edit</u> | <u>Output</u> | 9719-15E1   | Delete        |
| <u>Edit</u> | <u>Output</u> | BDEA-6002   | Delete        |

- Delete case file
  - Cannot delete after submission
  - Cannot be undone once deleted
- Submit/Resubmit case when ready
  - Shows validation code after submission
  - Greyed out if no output saved

# Output Viewer

- Exactly what the examiner will see and use for scoring
- Shows last saved output, exactly as saved
  - Manual edits (not generated from data fields) included
- No editing capabilities
- Check carefully – once submitted, cannot be submitted again

# Output Viewer

- Four sections to choose
  - Case Presentation Output
  - IBO Ceph value viewer
  - All imaging viewer
    - Images labeled by section/description
  - Scoring results
    - Shown only to candidates
    - Allows viewing details scoring results and comments from examiner

Case Presentation Output Cephalometric Values (IBO) Imaging Scoring Results

Case ID Number 1

Patient's Name (or ID\*) JRD-201405 (Sample Case)

Patient Start Age 18

Presenter DH1001

Patient Birthdate 12 / 02 / 1995 Cal

Patient Current Age 19

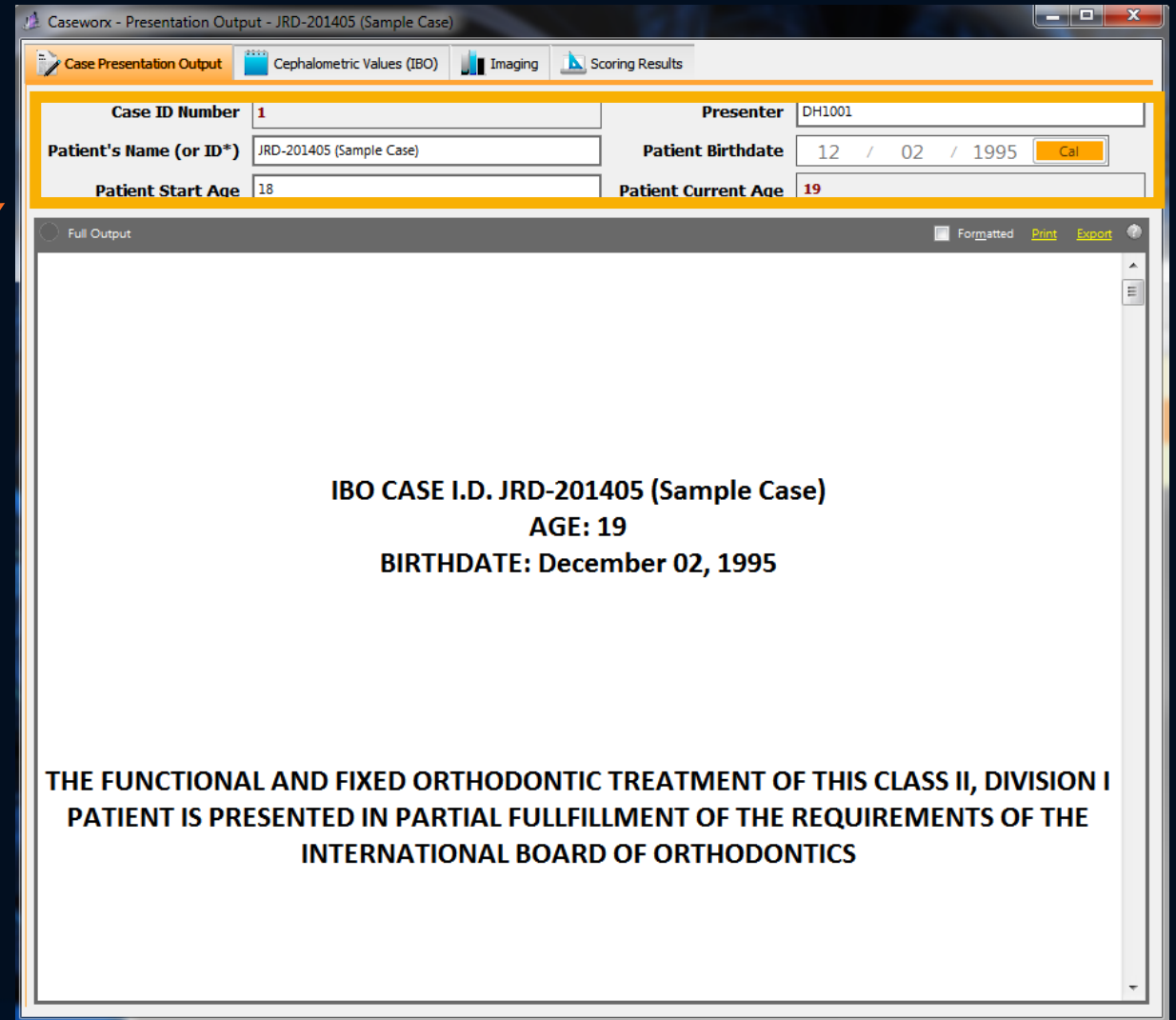
Full Output Formatted Print Export

IBO CASE I.D. JRD-201405 (Sample Case)  
AGE: 19  
BIRTHDATE: December 02, 1995

THE FUNCTIONAL AND FIXED ORTHODONTIC TREATMENT OF THIS CLASS II, DIVISION I  
PATIENT IS PRESENTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS OF THE  
INTERNATIONAL BOARD OF ORTHODONTICS

# Output Viewer

- Case details
  - Completely anonymous
  - Only shows presenter's ID and abbreviated patient ID (generated by presenter when case created)



The screenshot shows a software window titled "Casework - Presentation Output - JRD-201405 (Sample Case)". It has a tabbed interface with "Case Presentation Output" selected. The form contains the following fields:

|                         |                          |                     |                                 |
|-------------------------|--------------------------|---------------------|---------------------------------|
| Case ID Number          | 1                        | Presenter           | DH1001                          |
| Patient's Name (or ID*) | JRD-201405 (Sample Case) | Patient Birthdate   | 12 / 02 / 1995 <span>Cal</span> |
| Patient Start Age       | 18                       | Patient Current Age | 19                              |

Below the form is a large text area labeled "Full Output" with buttons for "Formatted", "Print", and "Export". The text in this area reads:

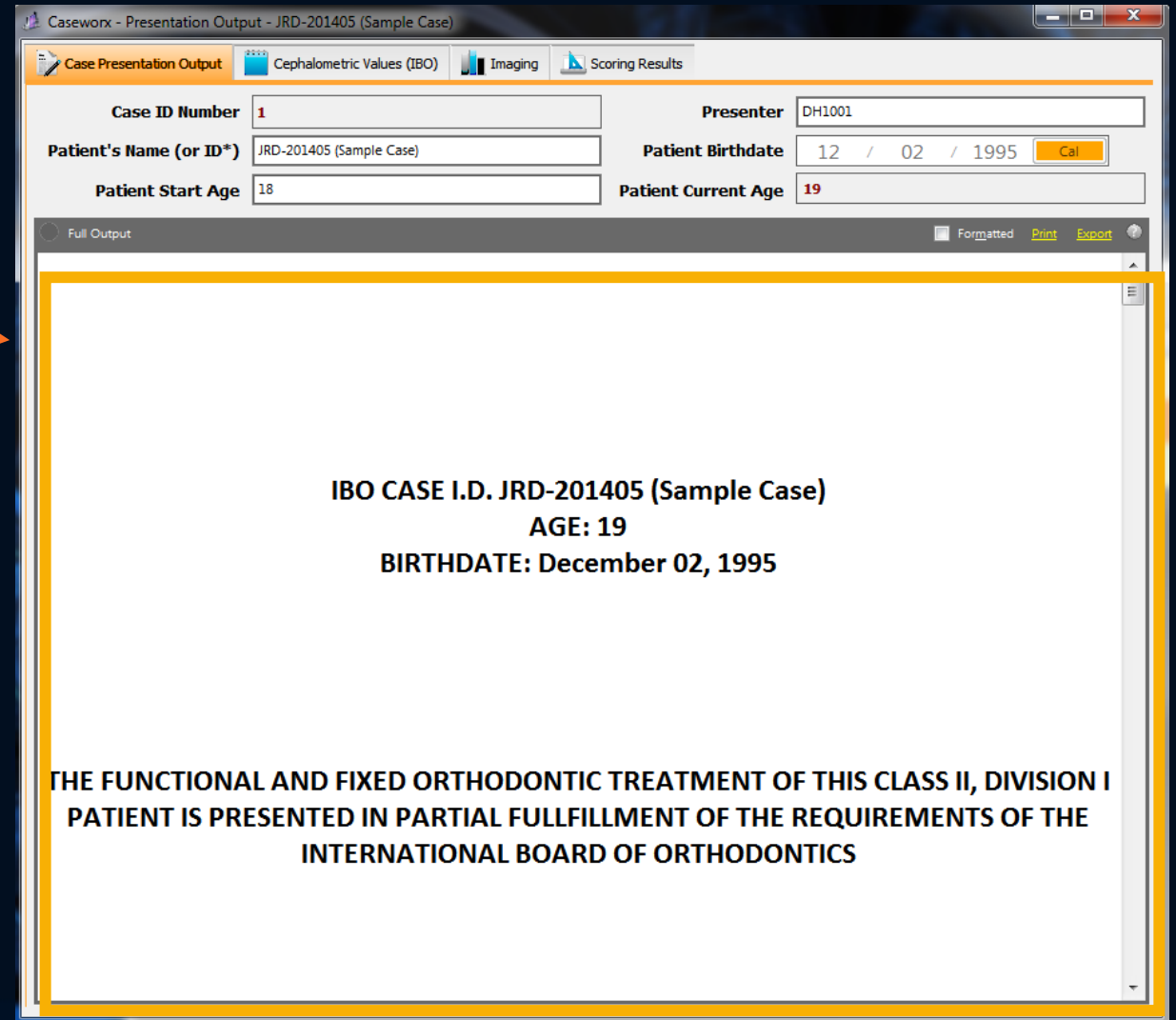
IBO CASE I.D. JRD-201405 (Sample Case)  
AGE: 19  
BIRTHDATE: December 02, 1995

THE FUNCTIONAL AND FIXED ORTHODONTIC TREATMENT OF THIS CLASS II, DIVISION I PATIENT IS PRESENTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS OF THE INTERNATIONAL BOARD OF ORTHODONTICS



# Output Viewer

- Case output
  - Shows exact copy as last saved in editor
  - Cannot be changed
  - Includes “printable” imaging and photo grids, embedded in correct section and location



Casework - Presentation Output - JRD-201405 (Sample Case)

Case Presentation Output Cephalometric Values (IBO) Imaging Scoring Results

Case ID Number 1 Presenter DH1001

Patient's Name (or ID\*) JRD-201405 (Sample Case) Patient Birthdate 12 / 02 / 1995 Cal

Patient Start Age 18 Patient Current Age 19

Full Output Formatted Print Export

IBO CASE I.D. JRD-201405 (Sample Case)  
AGE: 19  
BIRTHDATE: December 02, 1995

THE FUNCTIONAL AND FIXED ORTHODONTIC TREATMENT OF THIS CLASS II, DIVISION I PATIENT IS PRESENTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS OF THE INTERNATIONAL BOARD OF ORTHODONTICS

# Output Viewer

- IBO Ceph Sheet
  - Exact same as saved in editor
  - Cannot be changed
  - Check values carefully!



Caseworx - Presentation Output - JRD-201405 (Sample Case)

Case Presentation Output Cephalometric Values (IBO) Imaging Scoring Results

### Growth Analysis

|                  | Pre Treatment         | Post Treatment | + 2 yrs  |
|------------------|-----------------------|----------------|----------|
| Stage Of Growth  | Stage (CVMS) Stage VI | Stage VI       | Stage VI |
| Growth Direction | Y Axis to SN 60       | 62             | 63       |
|                  | Y Axis to FH 59       | 60             | 61       |

### Airway Analysis

|                                | Pre Treatment | Post Treatment | + 2 yrs |
|--------------------------------|---------------|----------------|---------|
| Upper Airway (Nasopharynx), mm | 14            | 14             | 14      |
| Lower Airway (Oropharynx), mm  | 12            | 12             | 12      |

### Skeletal Vertical Analysis

|                           | Pre Treatment | Post Treatment | + 2 yrs |
|---------------------------|---------------|----------------|---------|
| FMA, deg                  | 20.5          | 20             | 22      |
| LAFH (ANS to Mn), mm      | 61            | 61             | 62      |
| UAFH-LAFH / TAFH, % Ratio | 43-57%        | 44/56          | 44/56   |
| SN to GoGn (Steiner)      | 28            | 27             | 29      |

### Skeletal Sagittal Analysis

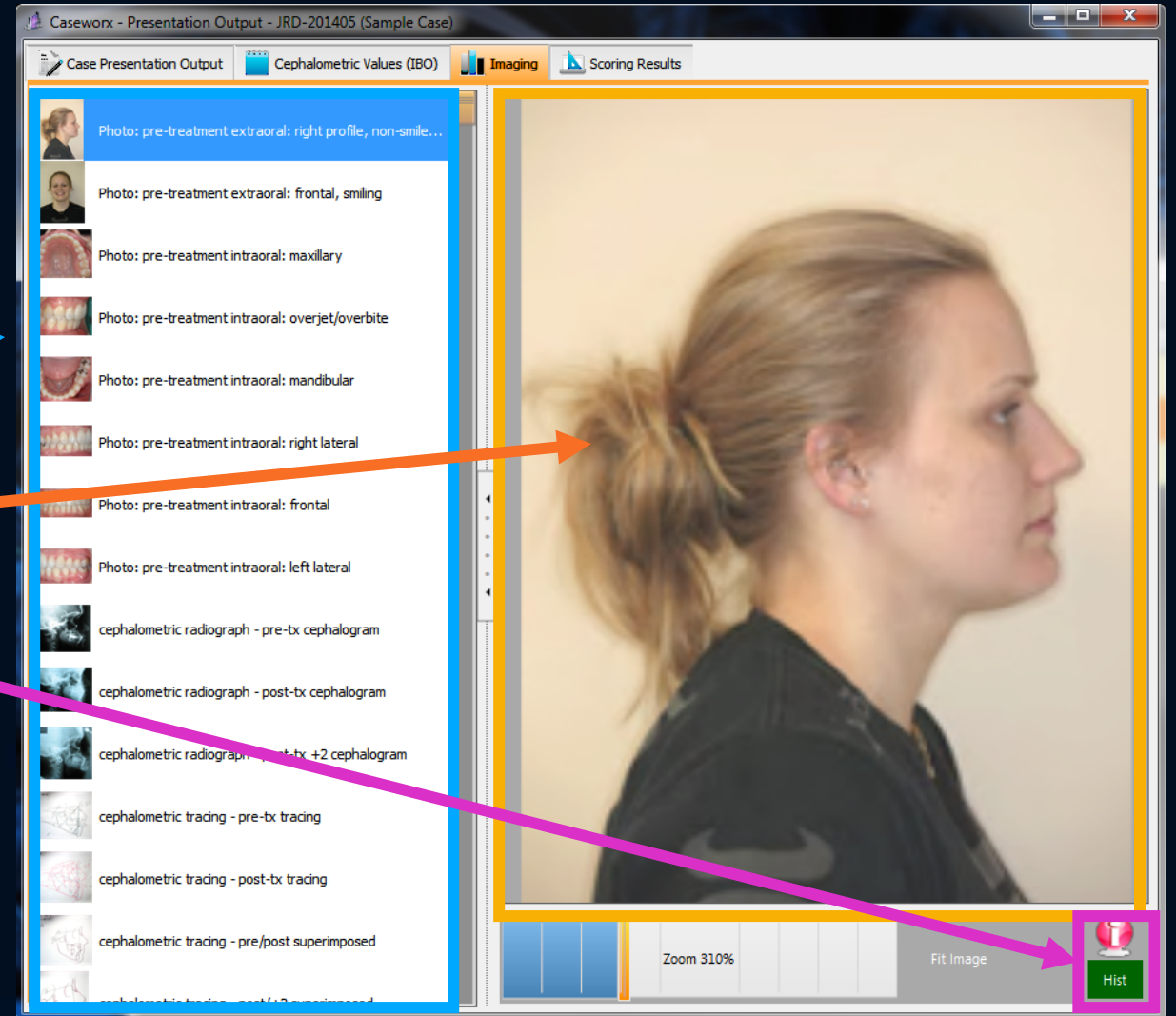
|                                   | Pre Treatment | Post Treatment | + 2 yrs |
|-----------------------------------|---------------|----------------|---------|
| Condylion to A pt (Mx Length), mm | 95            | 96             | 95      |
| Condylion to Gn (Mn Length), mm   | 69            | 68             | 69      |
| Difference (Mn Len - Mx Len), mm  | 26            | 28             | 26      |
| Wits (Jacobson), mm               | +1            | -1             | 0.5     |
| ANB, deg                          | +4            | +2             | +3      |

### Dento-Alveolar Relations

|   | Pre Treatment | Post Treatment | + 2 yrs |
|---|---------------|----------------|---------|
| IMPA (Incisor Mn Plane Angle), deg          | 96            | 91.5           | 90.5    |
| Interincisal Angle (Upper 1 - Lower 1), deg | 126.5         | 128            | 127     |

# Output Viewer

- Imaging Viewer
- Shows all images, labeled by section and description →
- Imaging detailed viewport →
- Image modification history viewer →
  - Enabled if image has been edited
  - Shows journal of changes to image



# Output Viewer

- Scoring Results
- Only visible to candidate
- Choose examiner position to show details
- Examiner comments in detail for each section
- Print a copy of the score sheet

Casework - Presentation Output - JRD-201405 (Sample Case)

Case Presentation Output Cephalometric Values (IBO) Imaging Scoring Results

Case Status: assigned

Examiner Note: -- no general exam notes listed --

Show Results for Examiner: 1 - first random assigned

### IBO Case Presentation Scoring Sheet

Case ID: JRD-201405 (Sample Case) Candidate Record ID: 1

|  |   |
|--|---|
| Section I: Problem List  | 2/2   |
| <i>Missing radiograph and chin findings</i>  |   |
| Section II: History  | 1/1   |
| Section III: Cephalometric Quality   | 1/2   |
| <i>Tongue ring not removed in post-tx cephalogram and earrings not removed in post+2 cephalogram</i>                 |   |
| Section IV: Cephalometric Quality  | 1/2   |
| <i>Tongue ring not removed in post-tx radiographs, poor angulation of patient resulted in poor quality of post+2</i> |   |
| Section V: Photographic Quality  | 1/2   |
| <i>Tongue ring not removed in post-tx photographs</i>  |   |
| Section VI: Study Models   | 2/2   |
| Section VII: Tracings, IBO Summary, & Diagnosis  | 30/30   |
| Ceph Points  | 10/10   |
| <input checked="" type="checkbox"/> sella  | <input checked="" type="checkbox"/> nasion    |
| <input checked="" type="checkbox"/> gonion   | <input checked="" type="checkbox"/> pogonion  |
| <input checked="" type="checkbox"/> orbitale   | <input checked="" type="checkbox"/> condylion |
| <input checked="" type="checkbox"/> B point  | <input checked="" type="checkbox"/> menton    |
| <input checked="" type="checkbox"/> ANS  | <input checked="" type="checkbox"/> PNS       |
| IBO Summary  | 10/10   |
| 1. Growth: Stage/Direction   | 2   |
| 2. Skeletal-Vertical   | 2   |
| 3. Skeletal-Longitudinal   | 2   |
| 4. Dental Relations  | 2   |
| 5. Soft Tissue Profile   | 2   |
| Diagnosis/Case Evaluation  | 10/10   |

Print Scoring Report



# Caseworx

CASE SUBMISSION

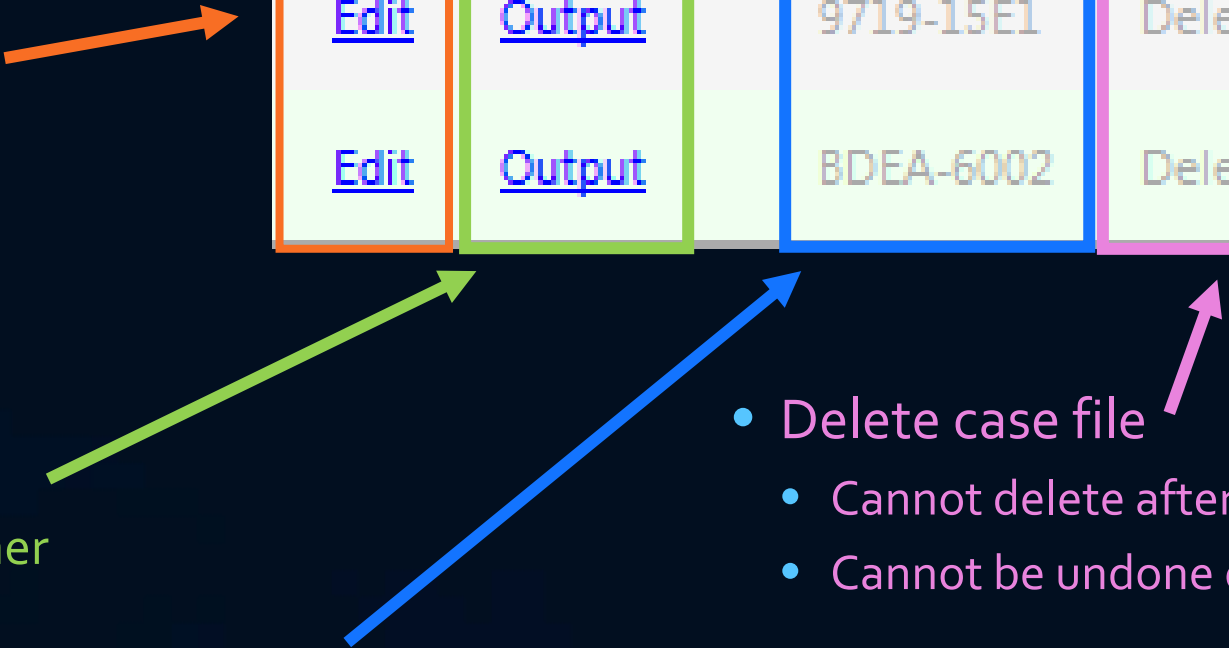




# Case Functions

- Case and output editor
  - Data editor
  - Image editor
  - Output editor

- Output Viewer
  - Shows exactly what examiner will see
  - Also shows detailed score returns
  - Greyed out if no output saved



The diagram shows a table with four columns: 'Edit', 'Output', 'Submit Case', and 'Delete'. Each column has three rows. The first row contains the column headers. The second and third rows contain the same text as the headers. An orange arrow points from the 'Case and output editor' list item to the 'Edit' column. A green arrow points from the 'Output Viewer' list item to the 'Output' column. A blue arrow points from the 'Submit/Resubmit case when ready' list item to the 'Submit Case' column. A pink arrow points from the 'Delete case file' list item to the 'Delete' column.

| <u>Edit</u> | Output        | Submit Case | <u>Delete</u> |
|-------------|---------------|-------------|---------------|
| <u>Edit</u> | <u>Output</u> | 9719-15E1   | Delete        |
| <u>Edit</u> | <u>Output</u> | BDEA-6002   | Delete        |

- Delete case file
  - Cannot delete after submission
  - Cannot be undone once deleted
- Submit/Resubmit case when ready
  - Shows validation code after submission
  - Greyed out if no output saved

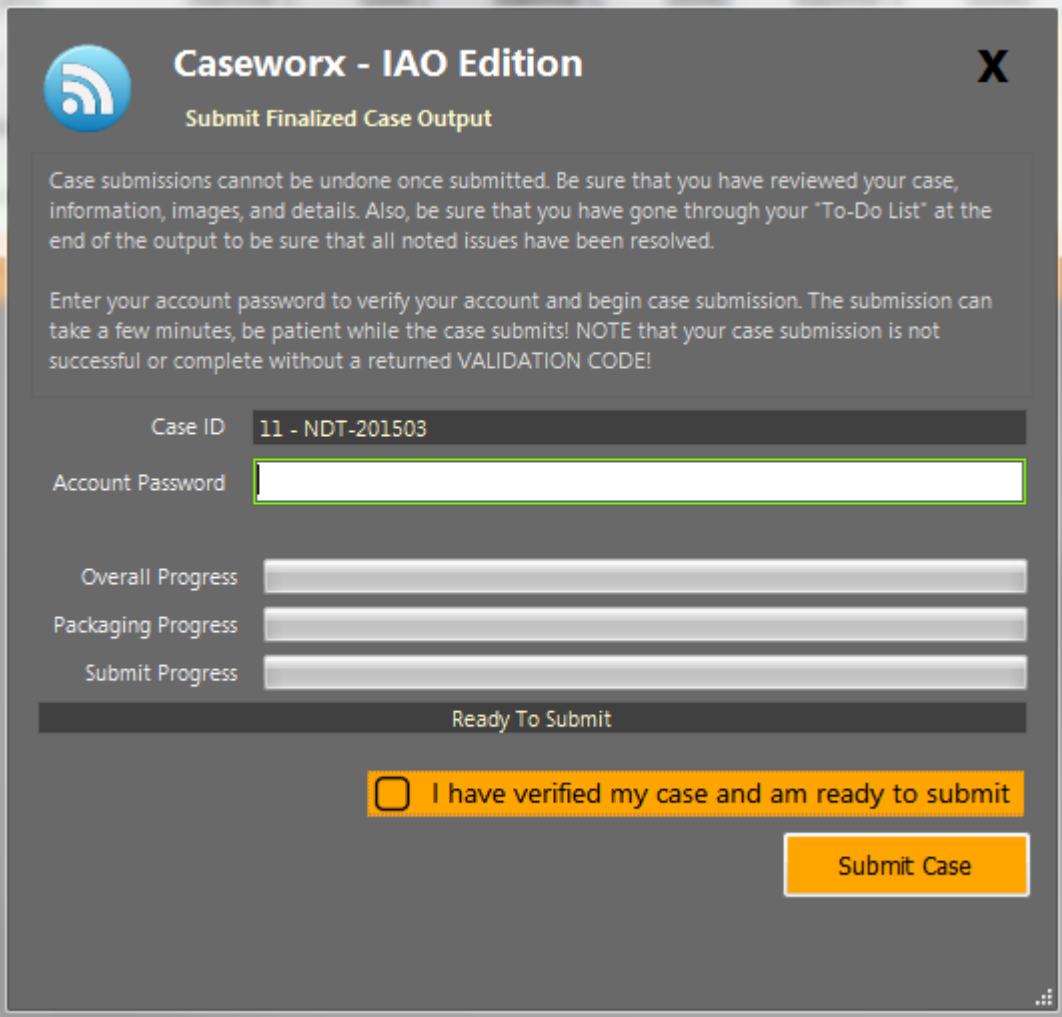
# Case Submission

- Available when output has been saved and logged in online
- No output, cannot submit
- Already submitted, has validation code from server
- Has output, not submitted yet
- Previously submitted, ready to re-submit case (if necessary)

|                      |                        |                                       |                        |
|----------------------|------------------------|---------------------------------------|------------------------|
| <a href="#">Edit</a> | <a href="#">Output</a> | <a href="#">Submit Case</a>           | <a href="#">Delete</a> |
| <a href="#">Edit</a> | <a href="#">Output</a> | 9719-15E1                             | Delete                 |
| <a href="#">Edit</a> | <a href="#">Output</a> | BDEA-6002                             | Delete                 |
| <a href="#">Edit</a> | <a href="#">Output</a> | <a href="#">Submit Case</a>           | <a href="#">Delete</a> |
| <a href="#">Edit</a> | <a href="#">Output</a> | <a href="#">Re-Submit (BB41-9128)</a> | Delete                 |

# Case Submission

- Enter account password and check verification box
- Be sure Internet connection is reliable and consistent
- Press “Submit Case” to package, encrypt, and submit case to server
- Not officially accepted unless server responds with verification code (email sent!)



The screenshot shows a software window titled "Caseworkx - IAO Edition" with a close button (X) in the top right corner. The subtitle is "Submit Finalized Case Output".

Instructions within the window state: "Case submissions cannot be undone once submitted. Be sure that you have reviewed your case, information, images, and details. Also, be sure that you have gone through your 'To-Do List' at the end of the output to be sure that all noted issues have been resolved." and "Enter your account password to verify your account and begin case submission. The submission can take a few minutes, be patient while the case submits! NOTE that your case submission is not successful or complete without a returned VALIDATION CODE!"

The form contains the following fields and elements:

- Case ID:** A text field containing "11 - NDT-201503".
- Account Password:** A password input field with a green border.
- Progress Indicators:** Three horizontal progress bars labeled "Overall Progress", "Packaging Progress", and "Submit Progress", all of which are currently empty.
- Status Bar:** A dark grey bar at the bottom of the progress section with the text "Ready To Submit".
- Verification:** A checkbox followed by the text "I have verified my case and am ready to submit".
- Submit Button:** An orange button labeled "Submit Case".

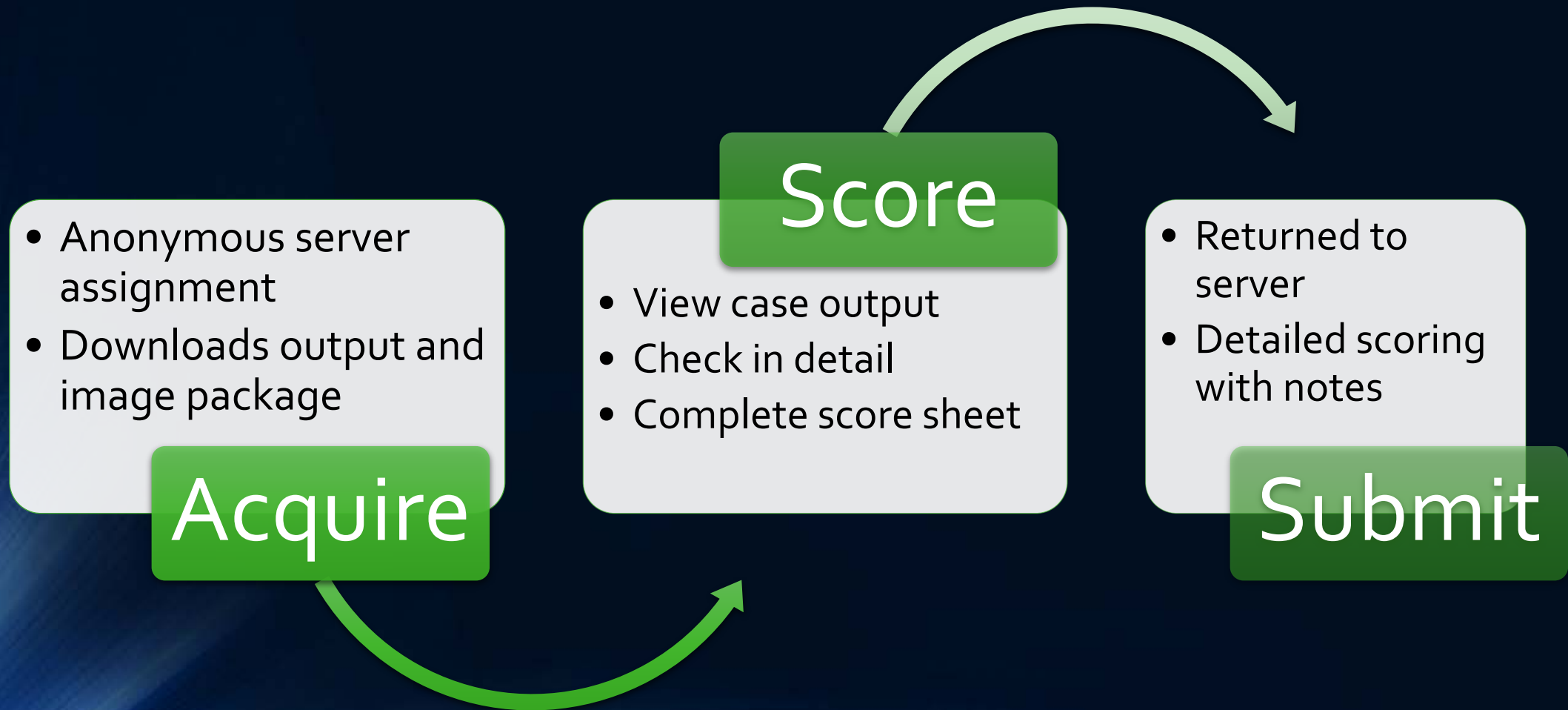
A small icon is visible in the bottom right corner of the window.

# Caseworx

SCORING



# Examiner Case Process





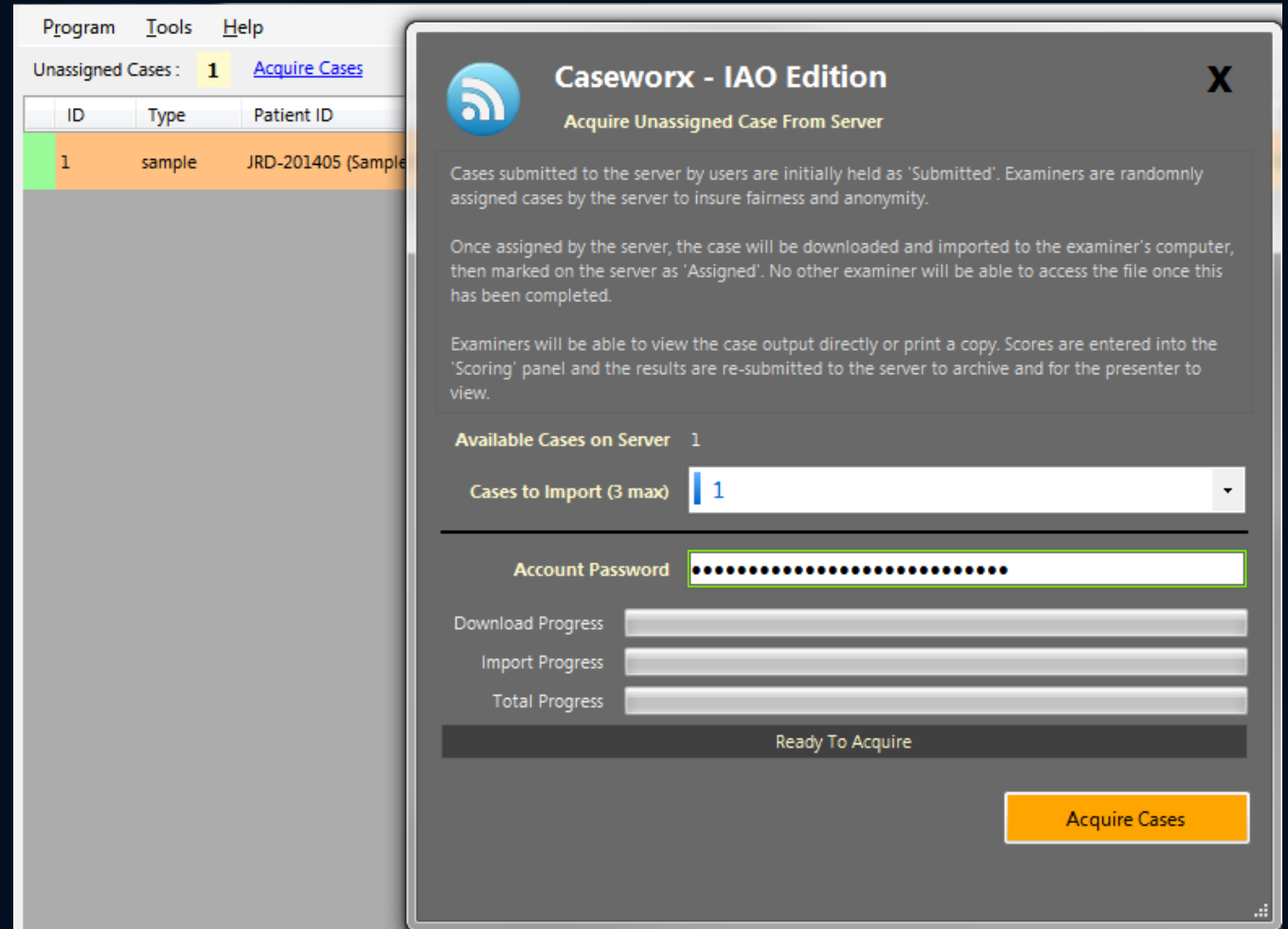
# Auto-Case Assignment Score Basis

- Two passing = Passed
- Two failing = Failed
- 1 pass, 1 fail = third assignment

|        | First Examiner Score | Second Examiner Score | Alt Examiner Score |
|--------|----------------------|-----------------------|--------------------|
| Passed | 71                   | 85                    | ---                |
| Passed | 65                   | 78                    | 73                 |
| Failed | 62                   | 59                    | ---                |
| Failed | 73                   | 59                    | 68                 |

# Case Assignment

- No name or ID when retrieving
- Server random assignment
- Examiner retrieves case package as generated
- Decrypted and imported to examiner's computer



# Scoring Screen

Case ID Number: 1

Patient's Name (or ID\*): JRD-201405 (Sample Case)

Patient Start Age: 18

Presenter: DH1001

Patient Birthdate: 12 / 02 / 1995

Patient Current Age: 19

Full Output

Formatted Print Export

IBO CASE I.D. JRD-201405 (Sample Case)

AGE: 19

BIRTHDATE: December 02, 1995

THE FUNCTIONAL AND FIXED ORTHODONTIC TREATMENT OF THIS CLASS II, DIVISION I PATIENT IS PRESENTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS OF THE INTERNATIONAL BOARD OF ORTHODONTICS

DOCTOR ID CODE: DU1004

Case Scoring Worksheet - JRD-201405 (Sample Case)

Presenter: DH1001

Details Ceph & Diagnosis Treatment Analysis

Section 1 - Clinical, Complaint, Evaluation

Score (2): 2

Notes: Missing radiographic and chin findings

Section 2 - Histories

Score (1): 1

Notes:

Section 3 - Ceph Radiographs

Score (2): 1

Notes: Tongue ring not removed in post-tx cephalogram and earrings not removed in post+2 cephalogram

Section 4 - Pano/FMX Radiographs

Score (1): 0

Notes: Tongue ring not removed in post-tx radiographs, poor angulation of patient resulted in poor quality of post+2

Section 5 - Photographs

Score (2): 1

Notes: Tongue ring not removed in post-tx photographs

Section 6 - Study Models

Score (2): 2

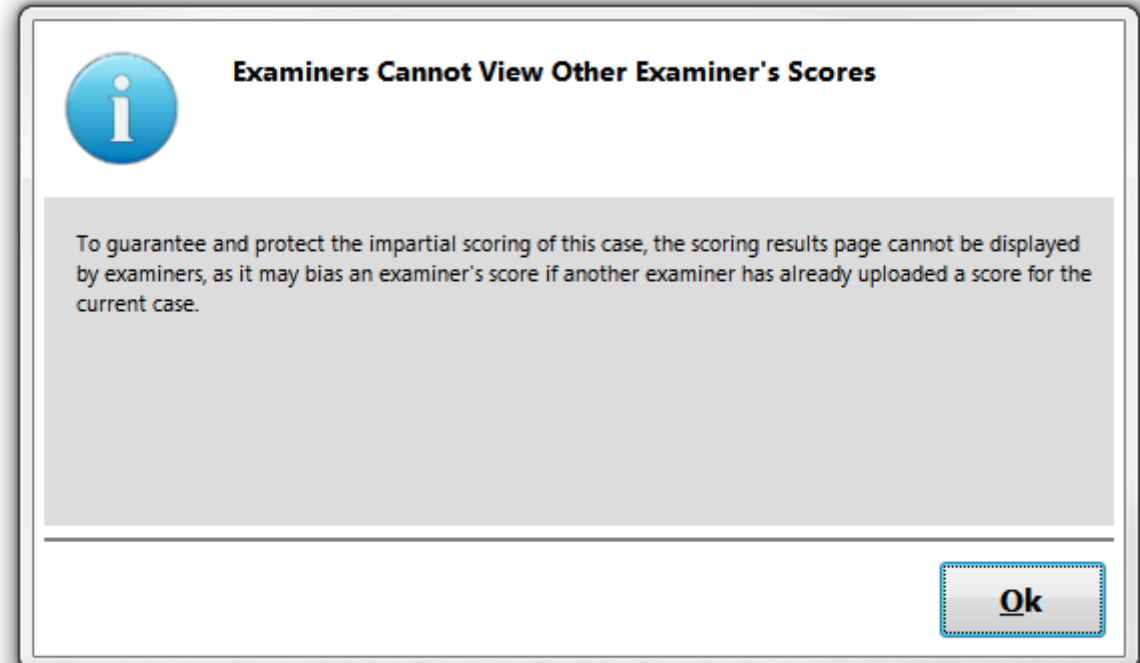
Notes:

Grand Total: 90

Clear Save Print Report

# Scoring Screen

- Examiners cannot view other scores or results
- Examiners do not know who other assigned examiner(s) is/are



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# Caseworx





# Caseworx

- Download [jklsoftware.com](http://jklsoftware.com)
  - Choose Products -> Caseworx ([jklsoftware.com/caseworx](http://jklsoftware.com/caseworx))
- Worldwide submission at anytime
- Anonymity of case
- Removes formatting errors and missed data
- Concentrate on quality data
- Retrieve results quickly and easily

# JKL Software Caseworx

Nelson Mark, ([nel@jklsoftware.com](mailto:nel@jklsoftware.com))  
<http://jklsoftware.com>