# Troubleshooting and Best Practices

## Overview

This section provides solutions to common issues, optimization tips, and best practices for using CareIQ Builder effectively. Use this as a reference when encountering problems or looking to improve your workflow.

## Common Issues and Solutions

### Connection Issues

#### “Not Connected to CareIQ Platform”

**Symptoms:** - Error message at top of screen - Cannot load assessments - Cannot save changes - API calls failing

**Possible Causes:** - Network connectivity issue - ServiceNow session expired - CareIQ backend unavailable - Authentication token expired

**Solutions:** 1. **Check Network Connection** - Verify internet connectivity - Try accessing other websites - Check if other ServiceNow apps work

1. **Refresh the Page**
   * Press F5 or Ctrl+R
   * System may reconnect automatically
   * Watch for “Connected” message
2. **Re-login to ServiceNow**
   * Log out and log back in
   * Refreshes authentication
   * Renews session
3. **Clear Browser Cache**
   * Clear cache and cookies
   * Reload CareIQ Builder
   * May resolve stale data issues
4. **Contact Administrator**
   * If issue persists
   * May be backend service issue
   * Administrator can check CareIQ platform status

### Loading Issues

#### Assessment List Won’t Load

**Symptoms:** - Blank screen - Spinning loading indicator indefinitely - No assessments display

**Solutions:** 1. **Wait**: Initial load may take time with many assessments 2. **Refresh**: Try reloading the page 3. **Check System Messages**: Look for error messages at top 4. **Browser Console**: Press F12, check Console tab for errors 5. **Different Browser**: Try Chrome, Firefox, or Edge 6. **Contact Administrator**: Report with any error messages

#### Builder Won’t Open Assessment

**Symptoms:** - Clicking “Open” does nothing - Partial loading then stops - Builder interface doesn’t appear

**Solutions:** 1. **Check Assessment Status**: Verify assessment is accessible 2. **Refresh Page**: Clear any stuck state 3. **Try Different Assessment**: Verify system is working 4. **Clear Browser Cache**: Remove cached data 5. **Check Permissions**: Verify you have access rights 6. **Report Issue**: Contact administrator with assessment ID

### Saving Issues

#### Changes Not Saving

**Symptoms:** - Click Save but changes don’t persist - Reload page and changes are gone - No success message appears

**Possible Causes:** - Network interruption during save - Session timeout - Validation errors - Backend error

**Solutions:** 1. **Check System Messages** - Look for error messages - Read specific error details - Address validation issues

1. **Verify Connection Status**
   * Confirm “Connected” message visible
   * If disconnected, reconnect
2. **Check Required Fields**
   * Ensure all required fields filled
   * Verify data formats are correct
3. **Try Again**
   * Make change again
   * Click Save
   * Watch for success message
4. **Document Changes**
   * If issue persists, save work externally
   * Copy question/answer text to document
   * Can re-enter after issue resolved

#### “Unsaved Changes” Warning Stuck

**Symptoms:** - Save/Cancel buttons won’t disappear - Keep showing after clicking Save - Changes appear to save but buttons remain

**This is a known issue** - See CLAUDE.md for save button pattern.

**Solutions:** 1. **Refresh the Page** - Reload to clear stuck state - Changes should be saved (check after reload)

1. **Check Actual Save Status**
   * Navigate away and back to section
   * If changes persisted, they saved correctly
   * UI may be out of sync
2. **Contact Administrator**
   * If this happens frequently
   * May indicate code issue needing fix

### Display Issues

#### Elements Not Showing Correctly

**Symptoms:** - Buttons missing - Text overlapping - Layout broken - Controls not visible

**Solutions:** 1. **Check Browser Zoom** - Should be 100% - Press Ctrl+0 to reset zoom

1. **Increase Window Size**
   * Minimum 1400px width recommended
   * Maximize browser window
2. **Clear Browser Cache**
   * Remove cached stylesheets
   * Reload page
3. **Try Different Browser**
   * Test in Chrome, Firefox, or Edge
   * May be browser-specific issue
4. **Disable Browser Extensions**
   * Ad blockers may interfere
   * Try incognito/private mode

#### Dropdown Menus Not Opening

**Symptoms:** - Click dropdown, nothing happens - Dropdown opens but immediately closes - Cannot select from dropdown

**Solutions:** 1. **Click Directly on Dropdown Arrow** - Not the label, the arrow/icon

1. **Wait for Page to Fully Load**
   * Ensure loading indicators complete
2. **Check JavaScript Errors**
   * Press F12, check Console tab
   * Look for errors
3. **Try Different Browser**
   * May be browser compatibility issue

### Typeahead Search Issues

#### Typeahead Not Showing Results

**Symptoms:** - Type in search box - No dropdown appears - No results shown

**Solutions:** 1. **Type More Characters** - May need 3+ characters - Try typing more of the search term

1. **Wait for Debounce**
   * Search may be delayed (300-500ms)
   * Wait a moment after typing
2. **Try Different Search Terms**
   * Use different keywords
   * Try partial words
3. **Check Connection**
   * Verify “Connected” message
   * May be backend search issue
4. **Escape and Retry**
   * Press Escape to close
   * Click in field and try again

#### Typeahead Results Wrong

**Symptoms:** - Results don’t match search - Seeing results for wrong content type - Results from different assessment

**Solutions:** 1. **Clear Search Field** - Delete text and start over

1. **Verify Context**
   * Ensure you’re in correct section/question
   * Check you’re searching right content type
2. **Refresh Page**
   * Clear any stuck state
   * Try search again

### Relationship Issues

#### Cannot Add Relationship

**Symptoms:** - Select item but doesn’t add - Click Add/Confirm, nothing happens - Relationship doesn’t appear in list

**Solutions:** 1. **Ensure Answer is Saved** - Can’t add relationships to unsaved answers - Save question first, then add relationships

1. **Check for Duplicates**
   * May already have that relationship
   * Look through existing relationships
2. **Verify Connection**
   * Check connection status
   * May be network issue
3. **Try Closing and Reopening Modal**
   * Close relationship modal
   * Reopen and try again

#### PGI Tree Won’t Expand

**Symptoms:** - Click problem/goal, doesn’t expand - Loading spinner indefinitely - No child items load

**Solutions:** 1. **Wait**: May take a moment to load 2. **Check Connection**: Verify backend connection 3. **Try Different Item**: Test if issue is specific to one item 4. **Refresh Page**: Clear stuck state 5. **Check System Messages**: Look for errors

### Performance Issues

#### Slow Loading

**Symptoms:** - Page takes long time to load - Responses are slow - Operations laggy

**Solutions:** 1. **Check Network Speed** - Test internet connection - Close bandwidth-heavy applications

1. **Reduce Browser Load**
   * Close unnecessary tabs
   * Clear browser cache
   * Disable extensions
2. **Section Size**
   * Very large sections (30+ questions) may be slow
   * Consider breaking into smaller sections
3. **Browser Resources**
   * Restart browser
   * Restart computer if necessary
   * Ensure adequate RAM available

#### Browser Freezing

**Symptoms:** - Browser becomes unresponsive - Cannot click anything - Page frozen

**Solutions:** 1. **Wait**: May resolve itself (give it 30 seconds) 2. **Check Task Manager**: Look for high CPU/memory usage 3. **Close Other Tabs**: Free up resources 4. **Refresh Page**: May lose unsaved work 5. **Report Issue**: Note what you were doing when it froze

## Best Practices

### Assessment Design

#### Plan Before Building

**Steps:** 1. **Define Purpose** - What information do you need? - Who will complete the assessment? - How will data be used?

1. **Outline Structure**
   * Sketch section hierarchy
   * Group related questions
   * Plan question flow
2. **Identify Conditional Logic**
   * Which questions depend on others?
   * Map trigger relationships
   * Avoid circular dependencies
3. **Review with Stakeholders**
   * Clinical staff
   * End users
   * Subject matter experts

#### Keep It Simple

**Guidelines:** - **Clear Questions**: Use simple language - **Logical Flow**: Questions in natural order - **Manageable Length**: Not too long (30-45 minutes max) - **Appropriate Detail**: Enough depth, not overwhelming

**Example - Simple is Better:** - ❌ “Have you experienced any episodes of acute dyspnea particularly during nocturnal hours?” - ✅ “Do you have shortness of breath at night?”

#### Use Consistent Formatting

**Consistency Helps Users:** - Question phrasing style - Answer format (parallel structure) - Voice selection (consistent per section) - Capitalization and punctuation

**Example - Consistent Answers:**

Good:  
- Never  
- Rarely  
- Sometimes  
- Often  
- Always  
  
Bad:  
- Never  
- Rare  
- It happens sometimes  
- Frequently occurring  
- All the time

### Question Writing

#### Best Practices

**Do:** - ✅ One question, one concept - ✅ Use simple, clear language - ✅ Avoid double negatives - ✅ Be specific - ✅ Include context if needed

**Don’t:** - ❌ Combine multiple questions - ❌ Use jargon without explanation - ❌ Ask leading questions - ❌ Make assumptions - ❌ Use ambiguous terms

#### Examples

**Poor Question:** “Do you not disagree that smoking cessation is unimportant for your health?” - Double negative, confusing, leading

**Better:** “How important is quitting smoking to you?” - Answers: Very important, Somewhat important, Not important

**Poor Question:** “Do you exercise and eat a healthy diet?” - Two questions in one

**Better:** “How often do you exercise?” “How would you describe your diet?” - Separate questions

### Answer Design

#### Complete Answer Sets

**Include All Options:** - Cover full range of possibilities - Add “Other (please specify)” for unlisted options - Include “Prefer not to answer” when appropriate - Add “Unknown” or “Not sure” if relevant

**Example - Complete Set:**

How often do you exercise?  
- Daily  
- 3-5 times per week  
- 1-2 times per week  
- Less than once per week  
- Never  
- Prefer not to answer

#### Mutually Exclusive Options

**Use mutually exclusive flag for:** - “None of the above” - “Not applicable” - “Decline to answer”

**Don’t use for:** - Regular answer options - Items that can coexist

#### Secondary Inputs

**When to Use:**

**Text Input:** - “Other (please specify)” - “If yes, please describe” - Open-ended follow-up

**Date Input:** - “If yes, when?” - “Date of diagnosis” - “Last occurrence”

**Numeric Input:** - “How many?” - “What dose?” - “Number of times”

### Conditional Logic

#### Keep It Manageable

**Guidelines:** - **Limit Depth**: Maximum 2-3 levels of conditional questions - **Avoid Circular Logic**: Question A triggers B triggers A = bad - **Test Thoroughly**: Every combination - **Document**: Map complex logic

#### Logical Triggers

**Good Use Cases:** - Yes/No follow-up: “If yes, when?” - Detail gathering: “If other, specify” - Risk assessment: “If high risk, complete full evaluation”

**Avoid:** - Too many layers (confusing) - Triggers that rarely apply - Complex multi-conditional logic

### Relationship Management

#### Strategic Linking

**Link Relationships When:** - Clinically meaningful - Supports care workflow - Enables reporting - Triggers interventions

**Don’t Link Just Because:** - Avoid over-linking - Every relationship should have purpose - More relationships = more complexity

#### PGI Best Practices

**Problem Selection:** - Use standardized terminologies - Be specific enough to be actionable - Align with care planning systems

**Goal Setting:** - Measurable goals - Realistic timeframes - Relevant to problem

**Interventions:** - Evidence-based - Actionable by care team - Specific enough to implement

### Testing Strategy

#### Comprehensive Testing

**Test Checklist:** - [ ] Each question type functions - [ ] All answer selections work - [ ] Every triggered question appears/disappears correctly - [ ] Secondary inputs function - [ ] Mutually exclusive answers work - [ ] Section navigation works - [ ] All relationships configured - [ ] Cross-section triggers work - [ ] Performance acceptable - [ ] Multiple browsers tested

#### User Acceptance Testing

**Include End Users:** - Have actual users test - Observe them completing assessment - Note confusion points - Gather feedback - Make improvements

**Questions to Ask Testers:** - Was the purpose clear? - Were questions understandable? - Was anything confusing? - How long did it take? - What would you change?

### Workflow Optimization

#### Efficient Editing

**Tips:** 1. **Work Section by Section** - Complete one section fully before moving to next - Easier to maintain focus

1. **Use Library Content**
   * Leverage pre-built questions and answers
   * Faster than creating from scratch
   * Already validated
2. **Batch Similar Tasks**
   * Add all sections first
   * Then add all questions
   * Then configure relationships
   * More efficient than switching contexts
3. **Save Frequently**
   * Don’t make too many changes before saving
   * Reduces risk of lost work

#### Keyboard Shortcuts

Learn and use shortcuts: - **Ctrl+R or F5**: Refresh page - **Tab**: Navigate between fields - **Enter**: Confirm/Save (in some fields) - **Escape**: Cancel/Close dropdown - **Ctrl+0**: Reset zoom to 100%

### Version Control

#### Documentation

**Maintain Change Log:**

Version 2.0 - March 2024  
- Added section "Social Determinants"  
- Updated diabetes questions per ADA 2024  
- Fixed typo in Question 23  
- Removed deprecated medication list  
- Added 5 new barrier relationships  
  
Version 3.0 - June 2024  
- Enhanced PGI relationships  
- Improved conditional logic for pain assessment  
- Added secondary inputs to 8 questions  
- Updated based on pilot user feedback

#### Change Management

**Process:** 1. **Document Need**: Why is change needed? 2. **Plan Changes**: What specifically will change? 3. **Review**: Get stakeholder approval 4. **Create Version**: Make new draft version 5. **Implement**: Make changes systematically 6. **Test**: Thoroughly test new version 7. **Document**: Record what changed 8. **Communicate**: Notify users 9. **Publish**: Make new version active 10. **Monitor**: Watch for issues

### Collaboration

#### Multi-User Environments

**Best Practices:** - **Communicate**: Let team know when you’re editing - **One Editor at a Time**: Avoid simultaneous editing - **Save Often**: Reduce conflict risk - **Check Before Editing**: Ensure no one else is working on it - **Document Changes**: Help others track modifications

#### Handoffs

**When Handing Off to Another User:** 1. **Save All Work** 2. **Document What You Did** 3. **Note Any Issues** 4. **List What’s Left to Do** 5. **Communicate Directly**

## Security and Compliance

### Data Protection

**Remember:** - Don’t include PHI (Protected Health Information) in assessment questions as examples - Don’t test with real patient data - Follow your organization’s data policies - Understand who has access to assessments

### Access Control

**Best Practices:** - Use appropriate permissions - Don’t share login credentials - Log out when finished - Report unauthorized access - Follow organizational security policies

### Audit Trail

**System Tracks:** - Who created assessments - Who published versions - When changes were made - Who made modifications

**Best Practices:** - Don’t use shared accounts - Your actions are logged - Be thoughtful with edits - Follow change management process

## Getting Help

### Self-Service Resources

**Check First:** 1. This user guide 2. System messages (often explain the issue) 3. Browser console (for technical users) 4. Organization’s knowledge base

### Contact Support

**When to Contact:** - Issue not resolved by troubleshooting - System error messages - Permission issues - Data integrity concerns - Feature requests

**Information to Provide:** 1. **Description**: What were you trying to do? 2. **Steps**: Exact steps you took 3. **Expected**: What should have happened? 4. **Actual**: What actually happened? 5. **Error Messages**: Copy exact text 6. **Screenshots**: If helpful 7. **Browser**: Which browser/version 8. **Assessment ID**: If relevant 9. **Timestamp**: When it occurred

### ServiceNow Administrator

**Administrator Can:** - Check backend logs - Verify permissions - Investigate errors - Access system configuration - Resolve technical issues

**Administrator Cannot:** - Necessarily provide clinical guidance - Always resolve third-party (CareIQ) issues - Recover deleted data (usually)

## Tips for Success

### Start Small

**First Assessment:** - Keep it simple - Use library content - Limited conditional logic - Get comfortable with interface - Build complexity gradually

### Learn from Examples

**Study Existing Assessments:** - Look at published assessments - See how questions are structured - Learn relationship patterns - Adopt best practices

### Iterate and Improve

**Continuous Improvement:** - Gather user feedback - Track common issues - Update regularly - Refine based on data - Stay current with guidelines

### Stay Organized

**Organization Tips:** - Use consistent naming conventions - Maintain documentation - Keep change logs - Organize your work - Plan before building

### Training and Education

**Ongoing Learning:** - Attend training sessions - Read update notifications - Learn new features - Share knowledge with team - Ask questions

## Quick Reference

### Common Actions

| Task | Location | Button/Action |
| --- | --- | --- |
| Create Assessment | Assessment List | + New Assessment |
| Open Assessment | Assessment Card | Open |
| Add Section | Sections Panel | + Add Section |
| Add Question | Questions Area | + Add Question |
| Add Answer | Under Question | + Add Answer |
| Add Relationship | Answer Card | Relationship Icon |
| Preview Mode | Top Bar | Preview Mode Toggle |
| Publish | Top Bar | Publish Button |
| Create Version | Assessment Card | Create New Version |

### Key Reminders

* ✅ Save work frequently
* ✅ Test thoroughly before publishing
* ✅ Published assessments are read-only
* ✅ Use Preview mode for testing
* ✅ Document version changes
* ✅ Communicate with team
* ✅ Plan before building
* ✅ Keep questions clear and simple

## Glossary

**Assessment**: Complete questionnaire with sections, questions, and answers

**Section**: Organizational unit containing questions

**Question**: Individual item collecting information

**Answer**: Response option for select-type questions

**Triggered Question**: Question appearing based on answer selection (conditional logic)

**Relationship**: Connection between answer and clinical content

**PGI**: Problem-Goal-Intervention hierarchy

**Draft**: Editable assessment status

**Published**: Read-only, finalized assessment status

**Version**: Distinct iteration of an assessment

**Secondary Input**: Additional input required when answer is selected

**Mutually Exclusive**: Answer that excludes all other selections

**Typeahead**: Search-as-you-type functionality

**Voice**: Indicator of who asks/answers (Case Manager, Caregiver, Patient)

## Conclusion

This user guide provides comprehensive information about CareIQ Builder. Remember:

* **Plan First**: Think through your assessment before building
* **Build Systematically**: Work methodically section by section
* **Test Thoroughly**: Verify everything works as expected
* **Document Changes**: Keep records of modifications
* **Communicate**: Work with your team
* **Seek Help**: Don’t hesitate to ask questions

CareIQ Builder is a powerful tool for creating clinical assessments. Use it thoughtfully, test thoroughly, and focus on creating clear, useful assessments that support quality care.

**Good luck building great assessments!**