Search Functionality Re-Test Report

Test Date: December 15, 2025 - 13:05 UTC

Environment: Production (https://carelinkai.onrender.com)

Method: Hard refresh + thorough debugging

Tester: Automated testing with comprehensive analysis

Executive Summary

Overall Status: ❌ NOT WORKING

The search functionality is NOT working in production. Despite the code being correctly implemented in the repository, the search feature fails to filter documents when users type in the search box. All documents remain visible regardless of search terms entered.

Test Results

Overall Status: ❌ NOT WORKING

Detailed Findings

1. Search Behavior

- ✅ Search input field is present and visible
- ✅ Search input accepts text input
- ❌ **Documents DO NOT filter when typing**
- ❌ **Filtering NEVER happens**
- ❌ **Results are NOT accurate** - all documents remain visible

Test Evidence:

- Initial state: 5 documents visible
- After typing "te": 5 documents still visible
- After typing "Me": 5 documents still visible
- After typing "In": 5 documents still visible
- **Conclusion: Search does not filter documents at all**

2. Network Analysis

- ✅ API calls ARE being made when typing
- ✅ API URL: `/api/family/documents?search={term}`
- ✅ Search parameter IS included in URL

- ❌ **Response: ERROR - "Invalid query parameters"**
- ❌ **HTTP Status: 408 Bad Request**
- ❌ **Response count: 0 documents (error response)**

Network Evidence:

- Total requests during testing: 53+
- Multiple API calls with search parameter observed
- All API calls with search parameter return 408 Bad Request
- Error message: "Invalid query parameters"

API Test Results:

```json
{
  "Insurance": {
    "success": false,
    "error": "Invalid query parameters",
    "count": 0,
    "documents": []
  },
  "Medical": {
    "success": false,
    "error": "Invalid query parameters",
    "count": 0,
    "documents": []
  },
  "test": {
    "success": false,
    "error": "Invalid query parameters",
    "count": 0,
    "documents": []
  }
}
```

3. Console Analysis

- ❌ **Errors: API returns 408 Bad Request**
- ⚠️ **Warnings: PWA and membership data warnings (unrelated)**
- ✅ **Logs: Search input value correctly captured**

Console Errors:

```
GET https://carelinkai.onrender.com/api/family/documents?search=test 408 (Bad Request)
GET https://carelinkai.onrender.com/api/family/documents?search=Insurance 408 (Bad Request)
GET https://carelinkai.onrender.com/api/family/documents?search=Medical 408 (Bad Request)
```

Error Details:

```json
{
  "error": "Invalid query parameters",
  "details": {...}
}
```

4. Frontend Analysis

- ✅ Search input field found: `input[placeholder="Search by title or tags..."]`

- ✅ Search input value correctly updates when typing
- ✅ React event handlers are attached (React props found)
- ✅ Frontend code is correctly passing search parameter to API
- ✅ API calls are being made with correct URL format

Frontend Evidence:

```
{
  "searchInput": {
    "found": true,
    "value": "In", // (example value during test)
    "placeholder": "Search by title or tags..."
  },
  "reactDetection": {
    "hasReact": true,
    "reactPropsFound": true
  }
}
```

5. Backend Analysis

- ❌ **Backend is REJECTING all search requests**
- ❌ **Error: "Invalid query parameters"**
- ❌ **HTTP Status: 408 Bad Request**
- ❌ **Backend validation is failing**

Backend Issue:

The backend API endpoint `/api/family/documents` is rejecting requests that include the `search` query parameter. This suggests:

1. The backend validation schema is too strict
2. The backend is not accepting the `search` parameter
3. There may be a mismatch between frontend and backend expectations

6. Document Data

- ✅ 5 documents are loaded and visible
- ✅ Documents have searchable titles:
  1. "test_download_verification" (OTHER)
  2. "Test Download Document" (OTHER)
  3. "Medical Record - Margaret Martinez - December 2025" (MEDICAL RECORD)
  4. "Insurance Card - Margaret Martinez" (INSURANCE DOCUMENT)
  5. "Care Plan - Margaret Martinez" (MEDICAL RECORD)

Root Cause Analysis

Primary Issue: Backend API Validation Error

The root cause is a BACKEND ISSUE, not a frontend issue.

Evidence:

1. ✅ Frontend code is working correctly:
   - Search input captures user input
   - React event handlers are attached

- API calls are made with correct URL format
- Search parameter is correctly passed: `?search={term}`

2. ❌ Backend code is REJECTING requests:
   - All API calls with `search` parameter return 408 Bad Request
   - Error message: "Invalid query parameters"
   - Backend validation is failing

Technical Analysis:

The backend API endpoint `/api/family/documents` appears to have a validation schema that is rejecting the `search` query parameter. This could be due to:

1. **Zod validation schema issue**: The backend may be using a strict validation schema that doesn't include the `search` parameter
2. **Query parameter type mismatch**: The backend may expect a different format or type for the search parameter
3. **Missing parameter definition**: The backend route handler may not have the `search` parameter defined in its accepted query parameters
4. **Deployment issue**: The latest backend code with search support may not be deployed to production

Code vs. Production Mismatch:

Based on the code analysis showing that search is correctly implemented, but production showing it's not working, this suggests:
- **The deployed backend code is outdated or different from the repository code**
- **The backend deployment may have failed or not included the latest changes**
- **There may be environment-specific configuration issues**

Conclusion

Is Search Working? ❌ NO

Why Not?

Backend API is rejecting search requests with "Invalid query parameters" error.

The frontend is working correctly and making the right API calls, but the backend is not accepting the `search` query parameter. This is causing all search requests to fail with a 408 Bad Request error.

What's the Impact?

- Users cannot search for documents
- All documents are always visible (no filtering)
- Search box appears to do nothing from user perspective
- Poor user experience

Recommendations

Immediate Actions Required:

1. **Check Backend Deployment**
   - Verify that the latest backend code is deployed to production
   - Check if the search functionality code is included in the deployed version
   - Review deployment logs for any errors

2. **Fix Backend Validation**
   - Review the API endpoint validation schema
   - Ensure the `search` query parameter is accepted
   - Update Zod schema or validation logic to accept search parameter
   - Test the API endpoint directly to verify it accepts search parameter

3. **Verify Backend Code**
   - Check `/api/family/documents` route handler
   - Verify that the search parameter is properly defined and handled
   - Ensure the search logic is implemented in the deployed code

4. **Re-deploy Backend**
   - If code is correct in repository but not in production, re-deploy
   - Verify deployment succeeds
   - Test API endpoint after deployment

5. **Add Backend Logging**
   - Add logging to see what parameters are being received
   - Log validation errors with details
   - This will help diagnose the exact validation issue

Testing After Fix:

Once backend is fixed, re-test with these scenarios:
1. Search for "test" - should show 2 documents
2. Search for "Medical" - should show 2 documents
3. Search for "Insurance" - should show 1 document
4. Search for "Care Plan" - should show 1 document
5. Clear search - should show all 5 documents

Screenshots

Screenshots have been automatically saved during testing and show:
1. Login page and successful authentication
2. Documents page with all 5 documents visible
3. Search box with various search terms entered
4. DevTools Network tab showing 408 errors
5. DevTools Console tab showing "Invalid query parameters" errors
6. All documents remaining visible despite search terms

Technical Details

Test Environment:

- **URL**: https://carelinkai.onrender.com
- **User**: demo.family@carelinkai.test
- **Browser**: Chrome with DevTools
- **Method**: Hard refresh (Ctrl+Shift+R)
- **Network**: 53+ requests monitored
- **Console**: All errors and logs captured

API Endpoint:

- **URL**: `/api/family/documents`
- **Method**: GET
- **Query Parameter**: `?search={term}`
- **Expected Response**: Filtered documents array
- **Actual Response**: 408 Bad Request with "Invalid query parameters" error

Frontend Implementation:

- **Search Input**: Working correctly
- **React Handlers**: Attached and functional
- **API Calls**: Made with correct format
- **URL Format**: `/api/family/documents?search={term}` ✅

Backend Issue:

- **Validation**: Rejecting search parameter ❌
- **Error**: "Invalid query parameters" ❌
- **Status Code**: 408 Bad Request ❌
- **Response**: No documents returned ❌

Next Steps

1. ✅ **Testing Complete** - Comprehensive testing performed with hard refresh
2. ❌ **Search NOT Working** - Backend validation error identified
3. 🔧 **Fix Required** - Backend needs to be fixed to accept search parameter
4. 🚀 **Re-deploy** - Backend needs to be re-deployed with fix
5. ✅ **Re-test** - After fix, re-test search functionality

Status: 🔴 CRITICAL ISSUE - SEARCH NOT WORKING

The search functionality is completely non-functional in production due to backend API validation errors. This needs to be fixed before the application can be considered production-ready.

Report generated by automated testing system
Test completed: December 15, 2025 at 13:05 UTC