Software Requirements Specification

Revised Self-Report Assessment of Functional

Visual Performance (R-SRAFVP) Application

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# Purpose

## Audience & Intended Use

The R-SRAFVP application is intended to be used by medical professionals for vision assessments. The materials for theory, understanding and use can be found in the R-SRAFVP Toolkit (link). The application is not meant to be a substitute for understanding how to use the R-SRAFVP, rather to automate the use of the R-SRAFVP and provide users better access and easier means of documenting the assessment for individual patients.

## Scope

The scope of the R-SRAFVP application is the ability for users to generate individual assessments for patients and provide data for longer term review for the R-SRAFVP assessment itself. The application will provide a means for users to enter, review and generate assessments. The application will be secured only allow users access to their own generated assessments. Cross user data access will not be allowed. Assessments entered through the application follow the toolkit form, scoring and output.

The data generated by users, for review of the R-SRAFVP assessment, will not be tied to users, patients, or any HIPAA data connection means. The data will be just the questions and answers. The data entered, as part of each assessment, is intended for long term review for improvement of the R-SRAFVP itself.

## Constraints

The R-SRAFVP application is meant to be a cross platform application. As such, the ability to test every possible device/OS/Browser combination to determine good use is improbable, if not impossible by this creator. Therefore, the application will be tested and verified to work on a small breadth of devices/OS’s/Browsers before general use.

## Dependencies

## Permission

Permission for the development and publication of the R-SRAFVP application was granted by Dr. Mary Warren (developer of the R-SRAFVP), Dr. Elizabeth Barstow (on behalf of the University of Alabama Birmingham).

# System Overview

## User Needs

## Use case Diagram

Start

Help information

Compliance information

Notice of Privacy Protections

Login

Create a new assessment

Create a progress/discharge assessment

Recall an assessment for updates

Lock an assessment

Deleting assessment(s)

Exporting assessment (PDF or electronic format)

Help

## Use Cases

# Product description

## Functional Requirements

Login

To view compliance information, permissions, authors, etc., user do not need to be logged in.

To use the assessment application, users must be logged in. Assessment functionality will not be accessible to non-authenticated users

Login authentication will be limited to use of existing providers (ex: Google, Facebook, etc.) credentials

The application will not support, maintain or administer separate login credentialiing functionality

Creating a new assessment

Assessments will be linked to logged in users.

Assessments will not be shareable between users

Assessment information will auto save entered information

Ability to start/stop/return to an assessment until locked

Ability to lock an assessment

New MRN’s must start with an Initial assessment

Existing MRN’s may have any assessment type assigned

Completed assessments will be saved for future reference by the logged in user

Questions

Each question is listed with assessment values

Each question shall only have 1 assessment value selected

Each question may have comments added

Assessment values may be altered

Calculations

## Performance Requirements

## Technical Requirements

## Data Requirements

## Interface Requirements

## Non-Functional Requirements

### Security/Privacy

* + The application will have a splash page indicating permissions, legalities and authors of the application.
  + To use the application, users must be authenticated

### Usability

### Scalability

### Performance

### Flexibility

### Quality

### Compliance

* The application must be HIPAA Privacy Rule compliant
* The application must be HIPAA Security Rule compliant.
  + Ensure the confidentiality, integrity, and availability of all e-PHI they create, receive, maintain or transmit;
* Identify and protect against reasonably anticipated threats to the security or integrity of the information;
* Protect against reasonably anticipated, impermissible uses or disclosures; and
* Ensure compliance by their workforce.4

Assessment:

A client will determine the questions to use for their assessment

CAS: A client assessment score is based on the aggregation from the client’s responses to each assessment question

TPS: A total possible score is based on the aggregation of the maximum response score for each question the client responds to.

Only completed questions will be scored.

An assessments score will be expressed as a percentage of the client’s ability to complete desired ADL tasks.

Calculating assessments

CAS/TPS \* 100

RSRAFVP Independence % = CAS/ TPS \* 100

Functional Score = 100% – RSRAFVP %

Any question that is Not applicable (NA) tasks is omitted from the calculation.

G-codes are assigned based on the client’s overall level of impairment in self-care.

Each question will have help information available to the user

There will be a complete help guide for the user (topics are TBD)

Each question will be listed in a section

Each question will be scored independently

**Data allowed to be entered as part of each assessment**

* + Location info (ex: state)
  + Sex (Male/Female)
  + Age
  + Eye Diagnosis (exact listing is tbd)
  + Co-morbid conditions (exact listing is tbd)
  + MRN
  + Therapist or evaluators name
  + Assessment date;
  + Assessment type: Initial, Progress note, or Discharge assessment
  + Client’s ratings for the assessment items using the R-SRAFVP rating scale (note: a rating scale key is located in columns E and F for quick reference).
  + Do not leave any responses blank. The spreadsheet will assign a rating of 0 for “Unable/Dependent” for those items.

**The assessment will provide the following output**

* the number of relevant measures,
* the composite score,
* the R-SRAFVP score,
* percentage of disability
* the G-code level.
* cells highlighted in red will be for items receiving a rating of less than 3 (e.g 0-unable/dependent, 1- great difficulty, or 2- moderate difficulty)
* These are to indicate the areas to be addressed as **Goals of Treatment** in the plan of care.
* Cells will turn white for items rated as Not Applicable to indicate that these items will not be included as part of client’s score or goals of treatment to be addressed.

The entire assessment will be printable as a PDF for use with EMR system

Data used for identifying Therapist/patient information will be kept separate from assessment data

Assessments shall be able to be saved by users, but only by the user entering it

Assessments shall be viewable, but only by the original user which entered it

Assessments will not be allowed to be viewed across different users

Assessments will not be sharable

Assessments shall be able to be deleted by users, but only the assessments entered by the same user

Deleting assessments will only break the connection between the therapist/client information and the assessment.

Deleting assessments will not remove the assessment data, but will not longer allow the record to be modified by the original therapist which entered it. The record will be considered static and no longer be allowed to change.

G-Code Scode**, s**ubtract the RSRAFVP percentage score from 100 to determine the percentage of impairment for functional reporting. Then match the percentage to the Modifier below:

|  |  |
| --- | --- |
| Modifier | Impairment Limitation Restriction |
| CH | 0 percent impaired, limited or restricted |
| CI | At least 1 percent but less than 20 percent impaired, limited or restricted |
| CJ | At least 20 percent but less than 40 percent impaired, limited or restricted |
| CK | At least 40 percent but less than 60 percent impaired, limited or restricted |
| CL | At least 60 percent but less than 80 percent impaired, limited or restricted |
| CM | At least 80 percent but less than 100 percent impaired, limited or restricted |
| CN | 100 percent impaired, limited or restricted |