

Learning Ninjas 

## **Creating a Custom Assessment Tool**

April 13, 2021

## OVERVIEW

The [Area Agency on Aging 1-B \(AAA 1-B\)](#) is a non-profit supporting older adults, people with disabilities, and family caregivers in southeast Michigan. In the fall of 2018, Learning Ninjas® supported one of their projects, designed to evaluate the preparedness of different communities to provide support for caregivers of aging populations. This grant-funded project was led by a diversity, equity, and inclusion (DEI) consultant, Kat LaTosch. Our goal was to design an assessment to help aging services professionals, advocates, and community leaders measure how well community systems support caregivers.

## DISCOVERY AND ANALYSIS

In the first phase of the project, we researched existing tools to test the assessment questions and scoring model with a small pilot group. Considering the short timeline and limited funding, we simplified our recommendations:

Start with something simple and cheap/free like a Google Form or Survey Monkey to create a "quiz" and apply answer-level scoring as-needed to generate your immediate feedback and scoring. Spend resources (time and money) on analysis and communication.

With a small number of respondents, you can export the data into Excel, run your own calculations, and manually email each individual's report.

Capturing the data in one online form allows for flexibility to analyze those data in a variety of ways. We can also import the data into a different analysis or survey/quizzing tool, if needed.



# DESIGN AND PROTOTYPE TESTING

Based on the outcomes from our initial analysis, we focused design and prototype cycles on:

1. The structure and formatting of questions, and
2. Testing an alternative scoring model for comparison/consideration.

Figure 1 shows an example of the Google Sheet we used to work through the scoring and weighting for each question. Notice that we also include specifications for question changes that are personalized based on the user’s profile (in this case, changes are driven by the city vs. county demographic).

Domain	Ques	Question	Answer	Numb	Priors	Criteria	Point	Max	Notes for county
INHOME	8	Which of the following services are offered in	-	-	-	not scored	-	-	Question different, same points
INHOME	9	Of those offered, which are available at	check all	14	low	per option checked	1	14	Same
INHOME	10	Which types of in-home respite service	check all	3	high	per option but minus	3	9	Question different, same points
INHOME	11	What is the maximum length of in-home	choose one	4	high	ranked points,	2	8	Same
INHOME	12	Do any in-home respite services offer short	yes/no	-	high	point for yes only	2	2	Same
INHOME	13	Does your community have out-of-home	yes/no	-	med	point for yes only	2	2	Both Points & Question different
INHOME	14	IF YES TO 13: Are any of the out-of-home	yes/no	-	med	point for yes only	2	2	Same
INHOME	15	IF YES TO 13: What is the maximum length of	choose one	4	med	ranked points,	1	4	Same
INHOME	16	Does your community have Adult Day Care	yes/no	-	med	point for yes only	2	2	Both Points & Question different
INHOME	17	IF YES TO 16: Which of the following	check all	3	med	per option checked.	1	2	Question different, same points
TRANSPORT	18	IF YES TO 16: [Trans] Which of the following	check all	2	med	per option checked.	1	2	Question different, same points
INHOME	19	IF YES TO 16: In addition to weekdays, which	check all	3	med	per option checked.	1	3	Question different, same points

Figure 1: Assessment Weighting and Scoring (collaborative spreadsheet)



## DEVELOPMENT AND IMPLEMENTATION

Given what we learned during the pilot, we recommended developing a custom assessment tool that met their core requirements (see Table 1) and provided future capability to create new domain-based assessments.

### CORE REQUIREMENTS

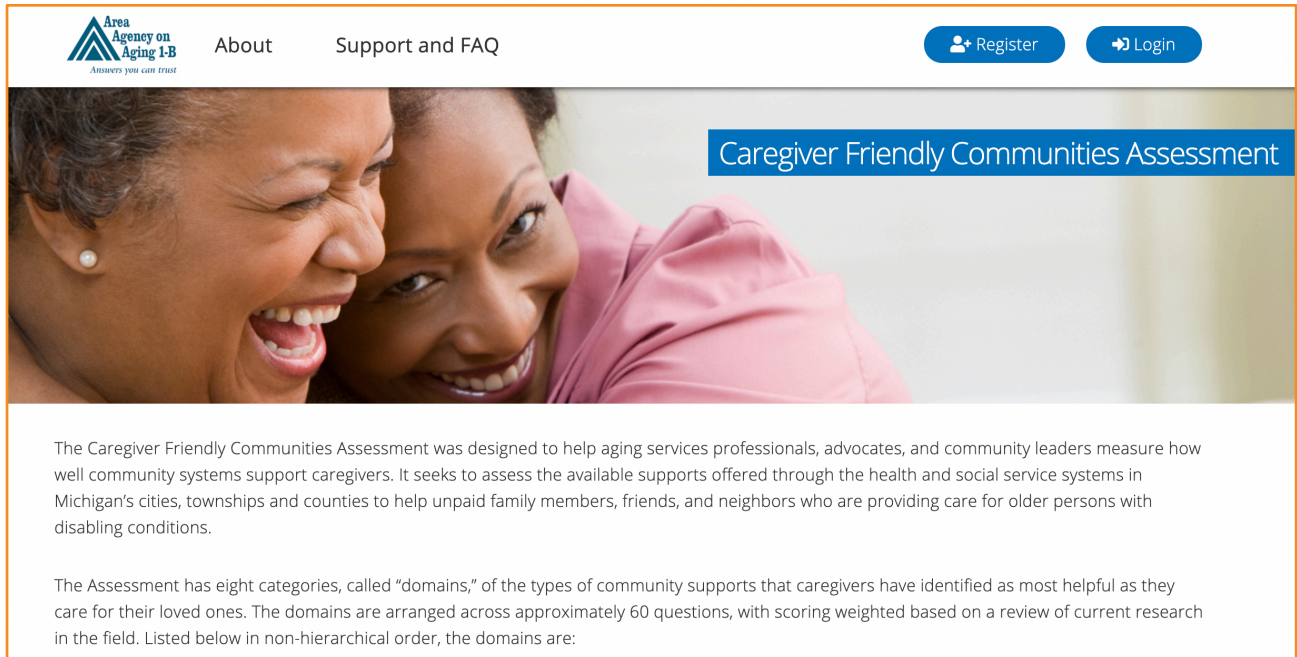
- Profile-driven personalization of questions and/or answer options
- Customizable domains/topic areas
- Branching questions
- Weighted scoring for individual questions and prioritized total scoring across each domain
- Custom feedback for domain-specific and overall score ranges
- Question-level feedback
- Question-level prioritization and score weighting
- Automated registration and account management
- Automated snapshot report
- Automated delivery of full report

**Table 1: Core Requirements**



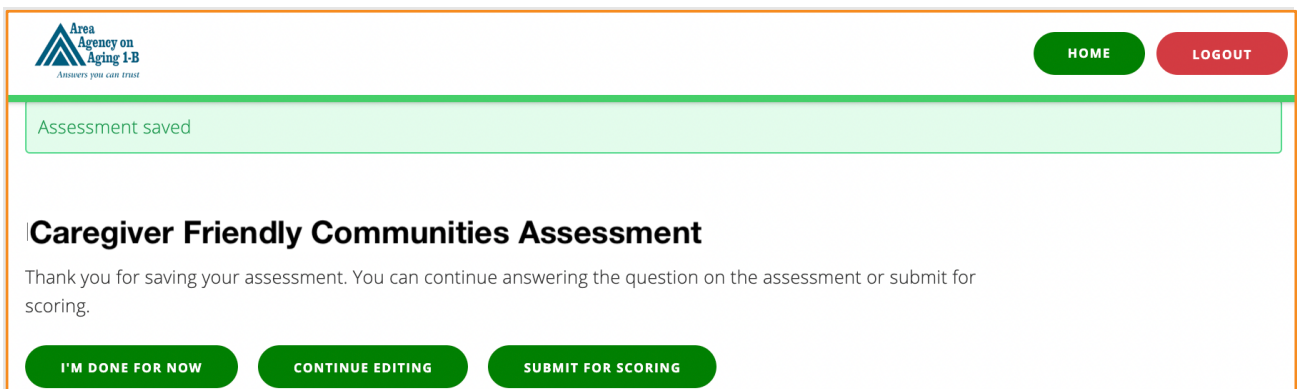
## THE OUTCOME

In Spring 2021, AAA 1-B officially launched the Caregiver Friendly Communities Assessment. Users access the web application via a front-end landing page with customizable content areas (see Figure 2). Individuals self-register and validate their accounts through automated email authentication. This allows for quick, streamlined access to the assessment.



**Figure 2: Caregiver Friendly Communities Assessment Homepage**

Users have the flexibility to save assessments to finish later or submit them for scoring (see Figure 3).



**Figure 3: Assessment Options**



Once submitted, users immediately receive a one-page snapshot report (see Figure 4).

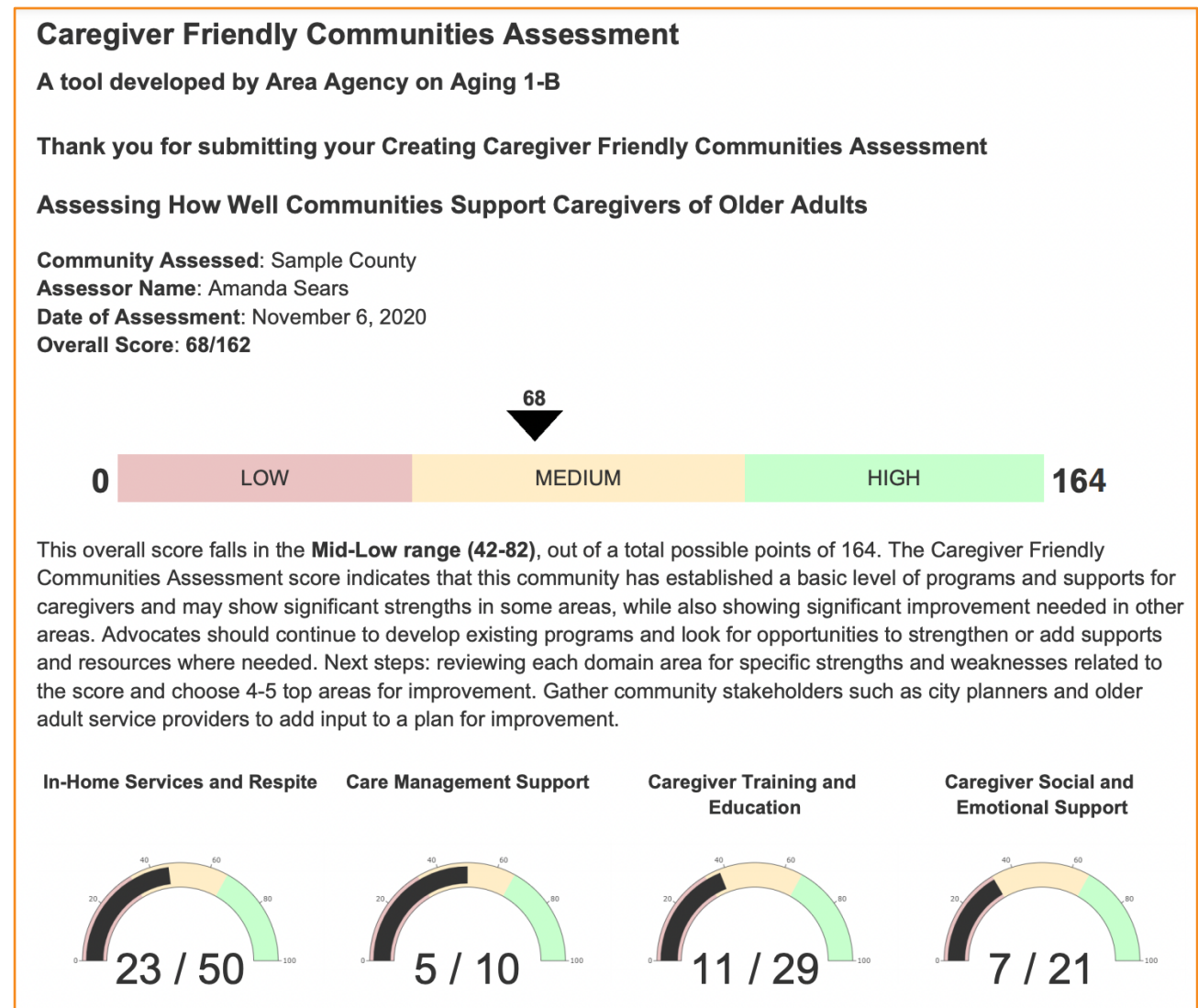


Figure 4: Snapshot Report

Users also receive a comprehensive report highlighting domain-specific scoring, with score range feedback, their text entry responses, and a list of key strengths and areas for growth (See Figure 5). The application generates these reports based on assessment responses and a weighted scoring algorithm. Users can take the assessment multiple times. The application maintains their assessment history and allows viewing and downloading of each report.



## **In-Home Services and Respite**

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Respite services, including in-home respite and out-of-home respite, is one of the top supports cited by caregivers as most beneficial in their ability to continue to provide good care for their loved one(s).

**Your score for this section was 23 / 50**

**Medium (17-32 points).** A score in this range indicates that this community has some areas of strength and some areas for improvement in the area of in- and out-of-home respite services. Below is a list of specific strengths and weaknesses.

**How have you seen in-home services change during the COVID-19 pandemic?**

Our county's caregiver services have changed drastically during the COVID-19 pandemic.

**How have you seen out-of-home respite services change during the COVID-19 pandemic?**

Our county's caregiver services have changed drastically during the COVID-19 pandemic.

**How have you seen Adult Day Health services change during the COVID-19 pandemic?**

Our county's caregiver services have changed drastically during the COVID-19 pandemic.

**Strengths:**

The availability of brief in-home respite services (1-2 hours)

**Areas for Growth:**

The types of in-home services that exist at full or reduced cost and without wait lists.

The types of in-home respite providers available

The stay length for in-home respite services

The availability of nearby out-of-home respite services

Out-of-home respite services that subsidized

Out-of-home respite services that are offered for a range of stay lengths

Minimum length for out-of-home respite

The availability of adult day services

Adult day services offered nearby and/or are subsidized

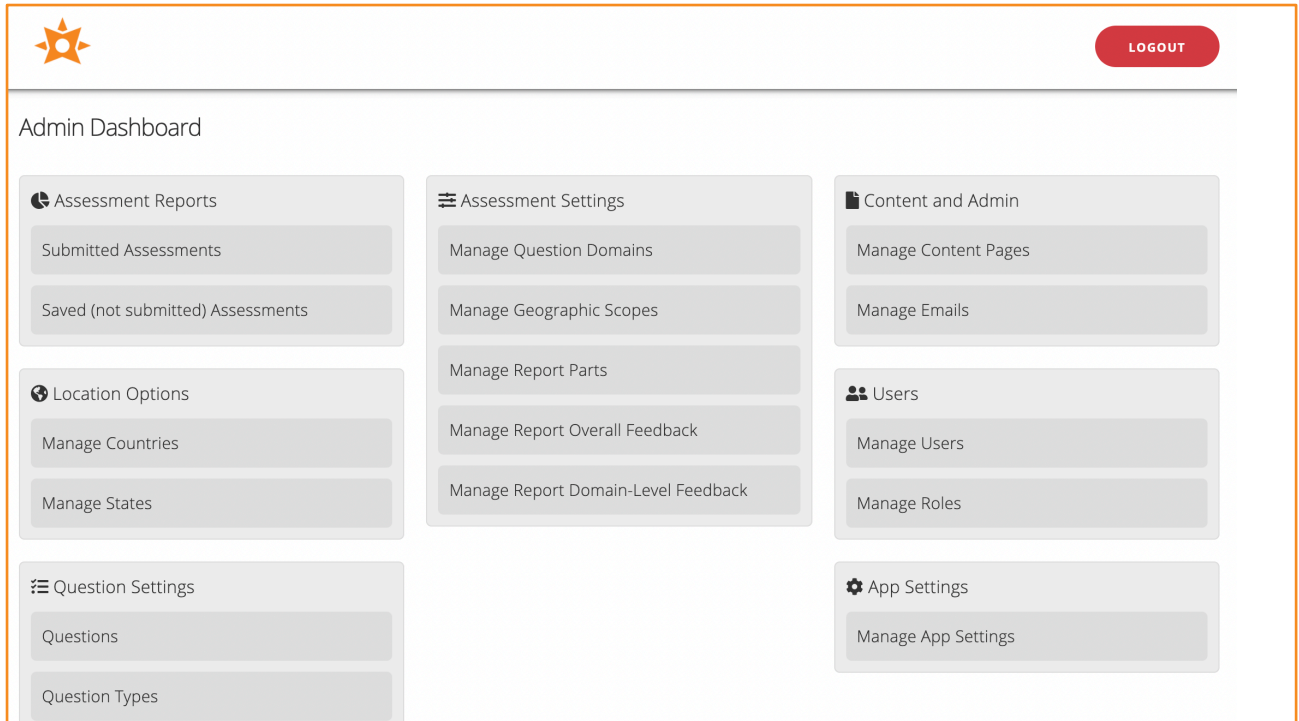
Adult day services with extended hours (evenings and weekends)



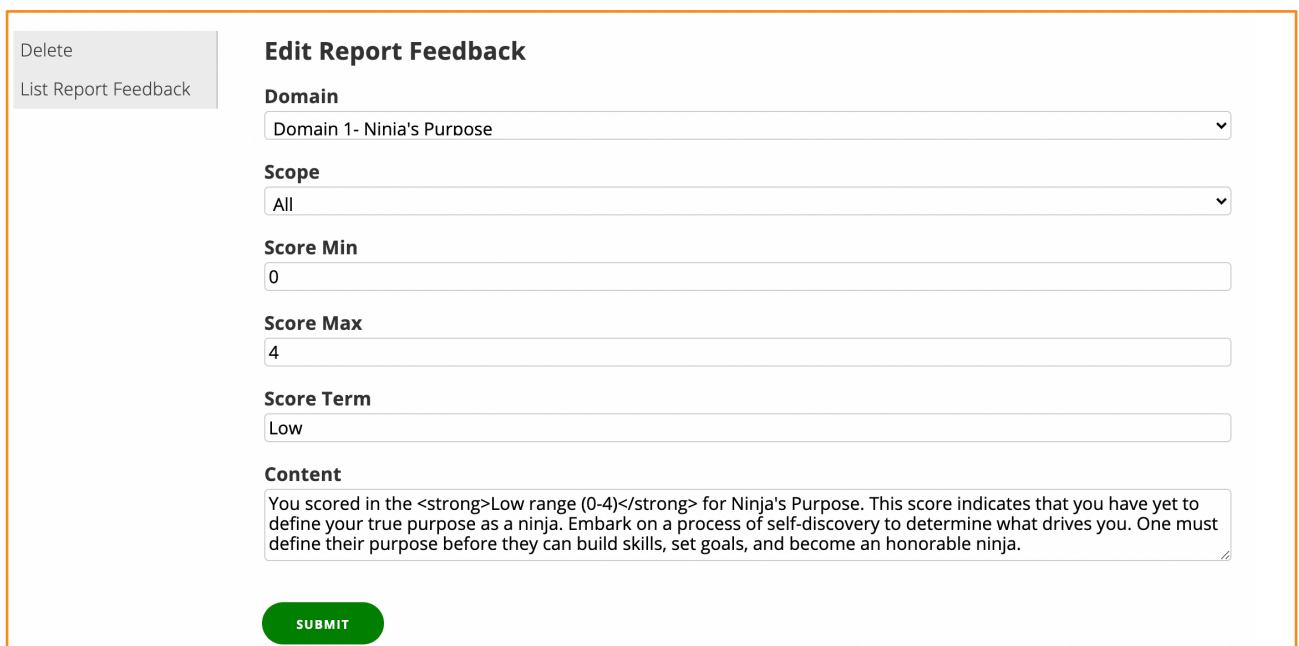
**Figure 5: A Section of the Comprehensive Report (In-Home Services and Respite Domain)**

On the administrative side of the assessment tool, we built an interface to manage all application and assessment settings and content, including text, formatting, scoring, and email messaging (See Figures 6 & 7). We also added a CSV export function for administrators to export the data from each report for further analysis.





**Figure 6: Admin Dashboard**



**Figure 7: Report Feedback Domain Customization Setting**





We were very pleased with the outcome of this project and look forward to learning more about how it impacts the communities this organization serves when communities start using the assessment.

Are you interested in learning more about creating your own custom assessment?

[Schedule a demo!](#)

