



# Assisted Living Report Card Advisory Group

Friday, June 28, 12p.m. – 2p.m.

# Organizations represented on the Advisory Group

- AARP Minnesota
- Alzheimer's Association
- Care Providers of Minnesota
- Diverse Elders Coalition (Minnesota Leadership Council on Aging)
- Elder Voice Family Advocates
- LeadingAge Minnesota
- Managed Care Organizations
- Minnesota Board on Aging
- Minnesota Department of Health
- Minnesota Elder Justice Center
- Ombudsman for Long Term Care
- Stratis Health
- Residential Providers Association of Minnesota (RPAMN)

# Meeting agenda

Topic	Presenter	Time
AL QOL survey and report card updates	DHS	12:05-12:30pm
Resident health, safety, and staffing measure development updates	UMN	12:30-1:15pm
Website usage data collection updates	MNIT	1:15-1:55pm
Next steps and closing	DHS	1:55-2:00pm



## QOL Survey and Report Card Updates

# Updates from Vital Research: data collection progress

- Data collection timeline
  - Tier 1 (Northern MN): February – April, 2024
  - Tier 2 (Twin Cities Metro): April – July, 2024
  - Tier 3 (Central and Southern MN): July – September, 2024
- Resident QOL data collection progress as of June 24, 2024
  - ALFs contacted for surveys = 973 (55% of in-scope ALs)
  - ALF surveys completed & MOE met = 432
  - ALF refusals = 46
  - ALF incompletes (non-refusal) = 383

# Assisted Living Report Card website usage

- DHS is exploring how to harness website usage data.
- MNIT will provide an overview during today's meeting.
- DHS is seeking advisory group feedback to inform our website usage data monitoring and evaluation strategy for the report card.

# Timeline for AL report card updates

Release Month	Ratings and enhancements to be published
November 2024	<ul style="list-style-type: none"><li>• Jan-June 2024 resident and family survey ratings</li><li>• Capacity (facility size)</li></ul>
February 2025	<ul style="list-style-type: none"><li>• July-Aug 2024 MDH licensing survey ratings</li><li>• Maltreatment findings (12 month look back period)</li></ul>
May 2025	<ul style="list-style-type: none"><li>• July-Dec 2024 resident and family survey ratings</li><li>• Sept-Nov 2024 MDH licensing survey ratings</li><li>• Maltreatment findings (12 month look back period)</li></ul>

Questions?





# Final recommendations for MDH licensure survey measures

Tetyana Shippee, PhD

Professor

Division of Health Policy & Management

School of Public Health

[tshippee@umn.edu](mailto:tshippee@umn.edu)

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# Goals/objectives

- Overview and feedback of recommendations made at the last meeting.
- Updated recommendations on peering
- Updated threshold recommendations

# Review: How we calculate scores based on scope and severity

**Table 1**  
**Health Inspection Score: Weights for Different Types of Deficiencies**

Severity	Scope		
	Isolated	Pattern	Widespread
Immediate jeopardy to resident health or safety	<b>J</b> 50 points* (75 points)	<b>K</b> 100 points* (125 points)	<b>L</b> 150 points* (175 points)
Actual harm that is not immediate jeopardy	<b>G</b> 20 points	<b>H</b> 35 points (40 points)	<b>I</b> 45 points (50 points)
No actual harm with potential for more than minimal harm that is not immediate jeopardy	<b>D</b> 4 points	<b>E</b> 8 points	<b>F</b> 16 points (20 points)
No actual harm with potential for minimal harm	<b>A</b> 0 point	<b>B</b> 0 points	<b>C</b> 0 points

- The scores assigned is the sum of the deficiency score for every tag of interest in each of the 3 domains (resident health, staffing, and safety).

# Review: How we calculate 5-star ratings

## We propose the 5-star rating system:

- 5 Stars: Mean plus  $1\frac{1}{2}$  standard deviations or top 7%
- 4 Stars: Mean plus  $\frac{1}{2}$  to  $1\frac{1}{2}$  standard deviations
- 3 Stars: Mean plus or minus  $\frac{1}{2}$  standard deviations
- 2 Stars: Mean minus  $\frac{1}{2}$  to  $1\frac{1}{2}$  standard deviations
- 1 Star: Mean minus  $1\frac{1}{2}$  standard deviations

## Once each facility has 2 surveys:

- The current survey will be weighted  $\frac{2}{3}$  and the previous survey  $\frac{1}{3}$ .
- If there is only 1 survey, it will be weighted by 1.

# Review: Calculating a threshold

- **What is a threshold?**
  - For our purposes, a threshold is a fixed score that defines the boundaries for each 5-star category for a given peer group.
    - The thresholds are created using the mean + or – the standard deviation scores created for the 5-star ratings
    - Each 5-star category will have an upper and lower boundary
      - Example: 5-star (0-16), 4-star (17-39), 3-star (40-83), 2-star (84-127) and 1-star (128 or higher)
- Thresholds will be published for providers ahead of time.
- Thresholds will be based on the previous 2 years of survey data and updated yearly.

# Response to Advisory Group feedback for size categories

<u>Previous</u> size categories	<u>Revised</u> size categories	Reason
Micro = 1-5 beds	Small = 1-5 beds	Same bed size, changed category name
Small = <u>6-50 beds</u>	Medium = <u>6-25 beds</u>	AG feedback Groupings from AHCA & NCAL
Large = <u>51+ beds</u>	Large - <u>26+ beds</u>	AG feedback Groupings from AHCA, NCAL & NIC

<https://www.ahcancal.org/Assisted-Living/Facts-and-Figures/Pages/default.aspx>

[https://www.nic.org/wp-content/uploads/pdf/NIC\\_InvestmentGuide-ExecSumm\\_INTR.pdf](https://www.nic.org/wp-content/uploads/pdf/NIC_InvestmentGuide-ExecSumm_INTR.pdf)

# Updated peering analysis

- Previous recommendations were based on peering by size and geography (Twin Cities metro vs. Rest of the State).
- Updated analysis includes peer groups by new size categories and geography
- Looked at peering by dementia care (DC) license more closely

# Dementia Care license analysis

Correlation Matrix	Licensure Type
Size	0.6862
Ownership	0.2012
Region	-0.1786
Licensure Type	

-Size: Small (1-5), Medium (6-25), Large (26+)    -Region: Twin Cities Metro (TCM) vs. Rest of state (ROS)

-License type: Assisted Living Facility (ALF) vs. Assisted Living Facility with Dementia Care (ALF-DC)

-Ownership: For-Profit vs. Non-Profit + Government/Tribal

## We do not recommend peering by license type (ALF vs. ALF-DC)

- We do not want to overcorrect since DC license is highly correlated with size.
- ALF-DC facilities perform better than ALFs
- Peering by DC would limit direct comparison between ALFs and ALF-DC for consumers



# Domain regression analysis

Group	Resident Health Score Difference from Reference Group	Safety Score Difference from Reference Group	Staffing Score Difference from Reference Group
<b>SMALL</b>	<b>Reference Group</b>		
<b>MEDIUM / Twin Cities</b>	0.09	0.09	0.16
<b>MEDIUM / Rest of State</b>	0.44***	-0.05	0.25**
<b>LARGE / Twin Cities</b>	0.27**	-0.39***	-0.21**
<b>LARGE / Rest of State</b>	0.63***	-0.14	0.03

\* = < 0.05    \*\* = < 0.01    \*\*\* = < 0.0001

# Update peering recommendations

## Peer by size

- Small (1-5)
- Medium (6-25)
- Large (26+)

## Peer by geography

- Twin Cities Metro
- Rest of State
- \*for medium & large facilities

# Threshold updates

- Based on the new size groupings, thresholds for each peer group for each domain have been updated and are presented on the next 3 slides (also included as a handout)
  - Peering results are based on surveys from January 1, 2022 – December 31, 2023.

# Updated resident health thresholds

Peer Group	5-star	4-star	3-star	2-star	1-star
Small	0-0	1-6	7-45	46-83	84+
Medium+TCM	0-0	1-9	10-50	51-91	92+
Medium+ROS	0-0	1-21	22-68	69-115	116+
Large+TCM	0-0	1-18	19-57	58-96	97+
Large+ROS	0-0	1-28	29-78	79-129	130+

# Updated safety thresholds

Peer Group	5-star	4-star	3-star	2-star	1-star
Small	0-0	1-45	46-92	93-139	140+
Medium+TCM	0-16	17-51	52-94	95-137	138+
Medium+ROS	0-16	17-43	44-90	91-136	137+
Large+TCM	0-4	5-33	34-69	70-106	107+
Large+ROS	0-16	17-40	41-85	86-129	130+

# Updated staffing thresholds

Peer Group	5-star	4-star	3-star	2-star	1-star
Small	0-0	1-6	7-34	35-62	63+
Medium+TCM	0-0	1-9	10-39	40-70	71+
Medium+ROS	0-0	1-11	12-42	43-74	75+
Large+TCM	0-0	1-4	5-25	26-45	46+
Large+ROS	0-0	1-7	8-34	35-61	62+



Questions?



## Understanding Azure Application Insights Monitor Users, Sessions, Events, Performance, MAU and Retention

Gary C Johnson/Michael Fong | MNIT



# Introduction

- Gary C Johnson – Lead developer DHS Microsoft Application Development Division (MADD)
- Michael Fong - Solutions Architect | Shared Services and Enterprise Architecture Division

# Introduction

- Azure Application Insights is a service for monitoring and analyzing the performance and usage of an application.
- Purpose: Real-time analytics and diagnostics for applications.
- Benefits: Monitor and improve applications performance, user engagement and retention.

# Tracking Users

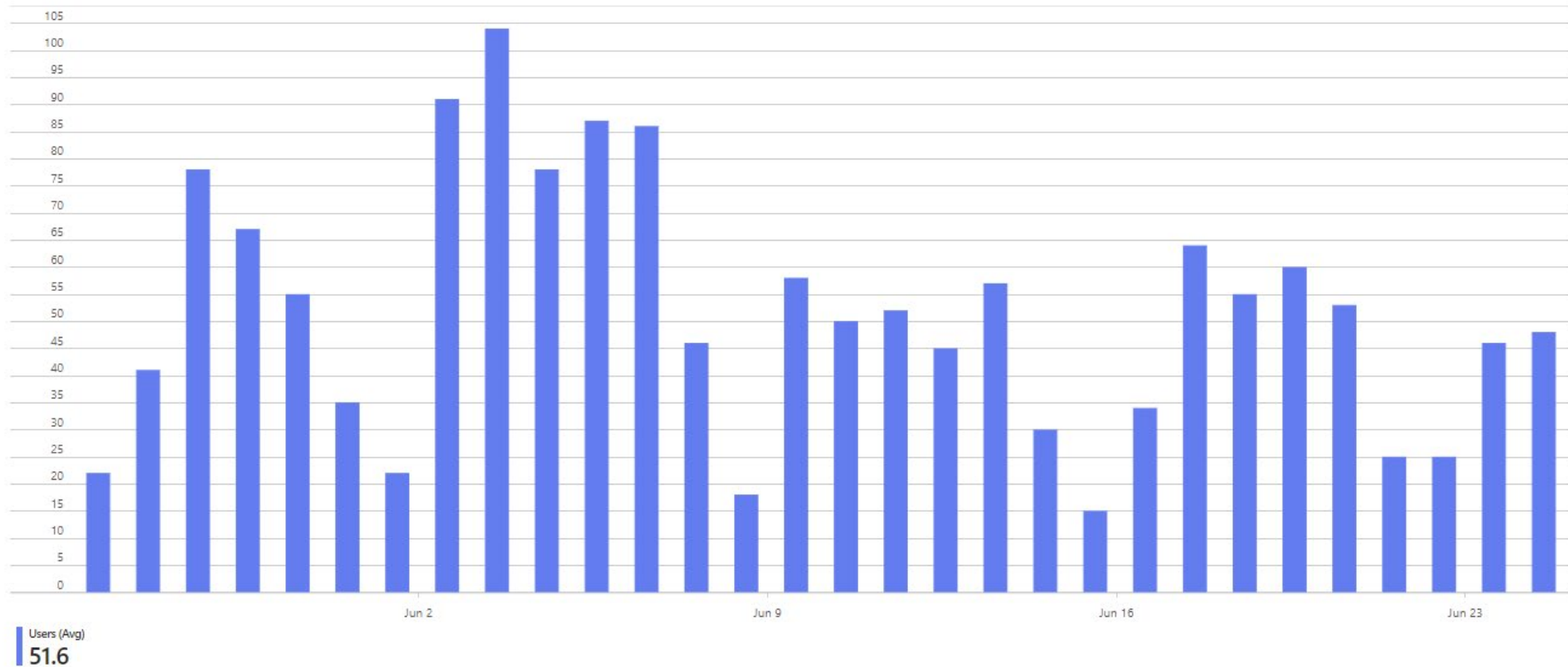
- User: A unique identifier that allows you to associate telemetry data with specific users.
- Automatic user identification and tracking
- Metrics tracked: New users, active users, user engagement levels

# Tracking Users

1.32k users

Chart Type

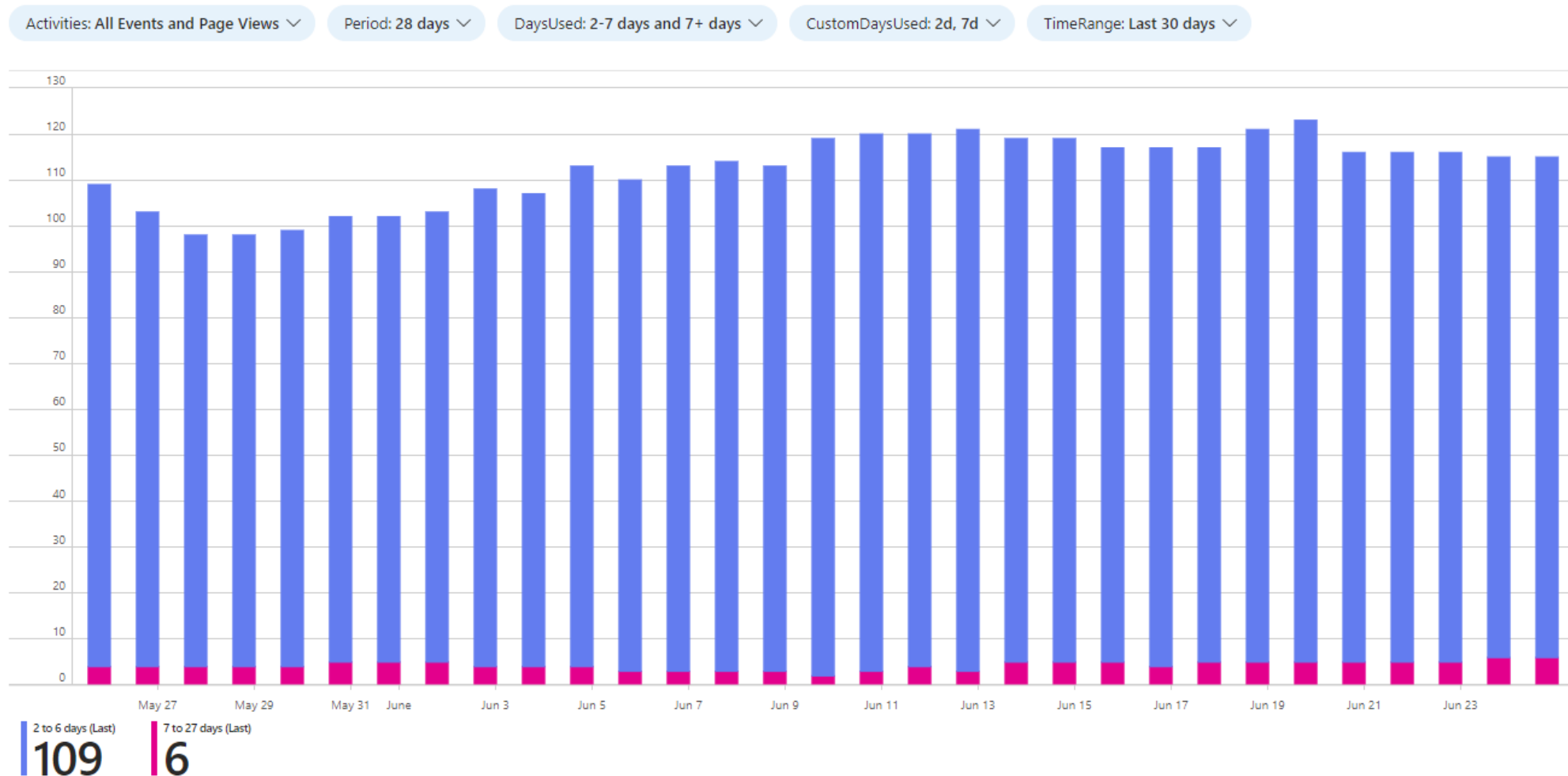
Bar chart



# Tracking Users

An *engaged* user is someone who has used your app a certain number of days within a time window. For instance, you could define an engaged user as a person who used feature X on at least 5 unique days over a 30 day range. This allows you to differentiate serious users of your app from the more casual ones.

Use the `Activities` parameter to choose the events that count towards engagement. The `Period`, `DaysUsed` and `CustomDaysUsed` parameters allow you to select set the engagement definitions.



# Monthly Active Users (MAU)

- Monthly unique users in the past 30 days.
- Importance: Measure user loyalty, identify churn patterns.
- Example: Retention rate calculation and trend analysis.

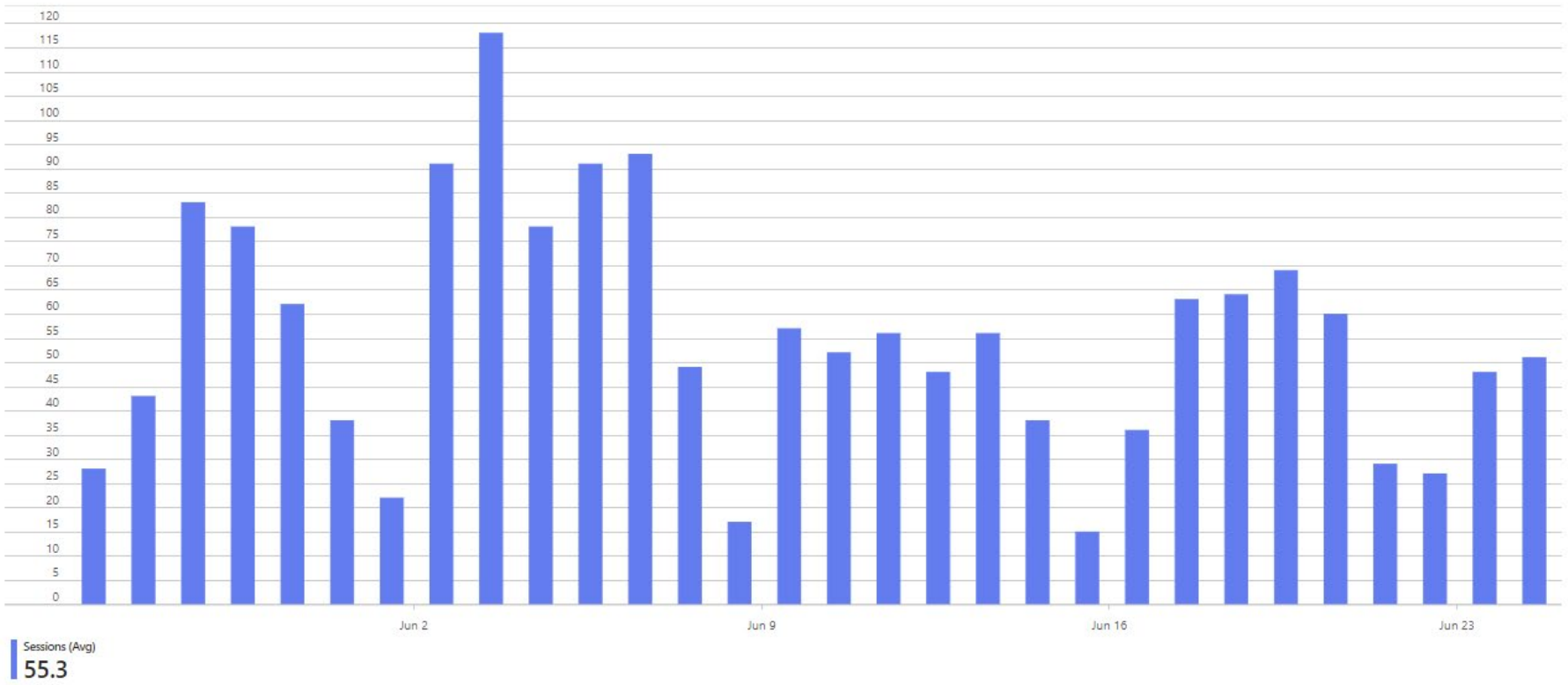
# Session Tracking

- **Session:** Starts when a user opens your application and ends after a period of inactivity or when the user closes the application.
- Tracking session duration, frequency and activities.

# Session Tracking

1.65k sessions

Chart Type  
Bar chart





# Session Tracking

PROPERTIES ⓘ

3 selected ▾

Performance ↑↓	Counts ↑↓
500ms-1sec	1.08K
1sec-3sec	799
250ms-500ms	781
<250ms	307
3sec-7sec	192
Other	63

Url ↑↓	Count ↑↓
https://alreportcard.dhs.mn.gov/	1.2K
https://alreportcard.dhs.mn.gov/Search	1.04K
https://alreportcard.dhs.mn.gov/Search?handler=ResultsL...	556
https://alreportcard.dhs.mn.gov/Search?handler=Geo	534
https://alreportcard.dhs.mn.gov/Search?handler=Facilities	439
Other	210

Operation name ↑↓	Counts ↑↓
/	1.21K
/Search	1.16K
/Help	35
/ContactUs	16
//	9

ACTIVE SESSIONS

Select Sessions

Show Most Active Sessions ▾

View session timeline  
Minneapolis, United States

**97 events**

Windows 10

View session timeline  
Saint Peters, United States

**59 events**

iOS 16.7

View session timeline  
Powell, United States

**48 events**

Mac OS X 10.15

View session timeline  
Saint Michael, United States

**37 events**

Windows 10

View session timeline  
Staples, United States

**35 events**

Windows 10

# Tracking Events

- Events: Refers to a specific action or occurrence within your application that you want to track and analyze.
- Events are used to capture meaningful interactions and custom activities in your application, providing insights into user behavior and application performance. Events can be automatically collected by Application Insights or manually logged by developers.

# Tracking Events

- Automatic and custom event tracking capabilities.
- Examples: User actions (e.g., clicks, searches), custom events (e.g., purchases, sign-ups).
- Importance of event tracking for understanding user behavior and application usage patterns.

# Retention Analysis

- Measures how well we keep users engaged and coming back over time. 6% means 6 out of 100 users continued to use this site after their initial interaction.

# Retention Analysis

User returned after # of week (last column is based on partial week data)

Used on	↑↓	Users	↑↓	<1w ↑↓	+1w	↑↓	+2w	↑↓	+3w	↑↓	+4w	↑↓	+5w	↑↓	+6w
Overall (Mar 31 - now)		3.7K		100%	6%		4%		3%		3%		3%		2%
Mar 31 - Apr 06		366		100%	7%		5%		4%		4%		4%		2%
Apr 07 - Apr 13		377		100%	6%		6%		3%		3%		3%		2%
Apr 14 - Apr 20		387		100%	8%		4%		3%		4%		3%		3%
Apr 21 - Apr 27		386		100%	5%		3%		4%		3%		3%		4%
Apr 28 - May 04		313		100%	6%		4%		4%		1%		4%		3%
May 05 - May 11		261		100%	7%		5%		5%		5%		3%		3%
May 12 - May 18		340		100%	6%		4%		4%		2%		3%		1%
May 19 - May 25		296		100%	7%		5%		2%		5%		1%		
May 26 - Jun 01		309		100%	9%		5%		4%		2%				
Jun 02 - Jun 08		479		100%	5%		3%		1%						
Jun 09 - Jun 15		285		100%	5%		2%								
Jun 16 - Jun 22		301		100%	5%										
Jun 23 - now		116		100%											

# Q & A

- Questions

Microsoft Application  
Development Division at DHS



Thank you!

## Recap: website usage data

- User tracking metrics (ex: new users, active users, user location, etc.)
- Session tracking metrics (ex: session duration, session frequency, session activities, etc.)
- Event tracking metrics (ex: clicks on specific links, use of specific website features, etc.)
- User retention metrics (what percent of users return to the site within a specified timeframe?)



# Questions for advisory group feedback

- What three website usage data trends are you most interested in getting updates on from DHS at future meetings? Why?
- What have you heard from consumers and providers about how they are using the report card website?
- What questions do you recommend DHS asks of the website usage data for our evaluation efforts?



Next steps and Q&A

## Next steps for the Advisory Group

- Today's meeting slides and notes will be posted to the project webpage:  
[www.mn.gov/dhs/assisted-living-report-card](http://www.mn.gov/dhs/assisted-living-report-card)
- Our next meeting is TBD. Topics will likely include:
  - Updates on 2024 resident and family surveys
  - AL Report Card rollout and website usage updates



## Questions?

Lauren Glass

[Lauren.Glass@state.mn.us](mailto:Lauren.Glass@state.mn.us)

651.431.3672