MinnesotaHelpNetwork™
CONNECTING YOU TO AGING & DISABILITY EXPERTS
NAVIGATE MINNESOTA'S LAND OF OVER 10,000 HELPING AGENCIES

MinnesotaHelp.info®

What we've learned over 16 years in doing data maintenance in a state mandated HCBS services web site!

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Charlie Winship, VP Solutions and Support, North Light Software

MINNESOTA BOARD ON AGING

History of MinnesotaHelp.info

- 2001 Legislative Session
  - Develop comprehensive long-term care database accessible via Internet
- Key planning stakeholders:
  - Counties, Area Agencies on Aging, 2-1-1, Care Providers, MN Board on Aging, Disability Services, DHS Planners, focus groups of seniors, caregivers, and people with disabilities
- Initial cost for purchase of tools: $173,500
- Initial set of resources:
  - United Way 211 – 26,000 Metro based
  - First Call MN – 27,000 Greater MN
- Website went live January 2003

Data….where it started and where it is now…

	Total records as of 1/28/04	Total records as of 8/23/2016
Agency	11639	12813
Site	15659	27448
Service	29795	42690
Points of Service	48562	71177

New Data Sources over the years

- Began with a basic I and R database (2001)
    - Added all Title III providers (2003)
    - Added All PCA Agencies and Living at Home Block Nurse/Parish Nurses
    - Medicare advantage, Part D and LTC insurance plans (2005/6)
    - Added Nursing Homes (to tie back to NH report card) and Registered Housing with Services (2010) so we could display the uniform consumer information guide (UCIG)
    - HCBS services added as a part of CMS negotiated waiver management reform efforts (2012)
    - NH API to PASSR form (2013)
    - Vacancy Tracking (2016)
    - Coming… PCAs (individuals) through development of a registry (2017)

Ongoing Maintenance via Data Management Contract

- Currently held by Metropolitan Area Agency on Aging
- Request for Proposal (RFP) every 5 years
- Budget FY2017: $1,350,000
  - State: $1,291,500
  - Federal: $58,500
- Fifteen dedicated staff
  - Director
  - Two supervisors
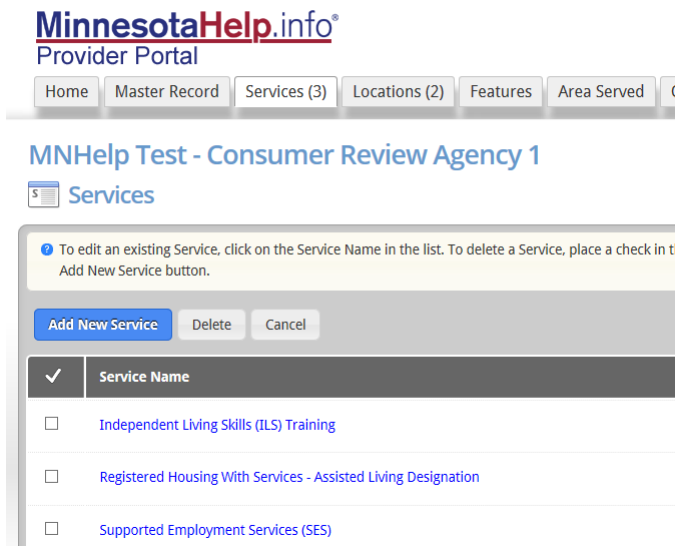 - Three data analysts/programmers
  - Nine data management specialists

Joint work with MN Board on Aging

- Work plan accountability
- Weekly conference calls to discuss policy and project questions
- Quality assurance
  - Measurable outcomes when conducting targeted outreach
  - Data integrity projects with Area Agencies on Aging
  - Monthly status reports
- Transparent policies and guidelines placed on Extranet
- Provider and consumer concerns escalated for problem solving

MinnesotaHelp.info® Data Sources**:**

- Provider Updates
  - Provider Portal
  - Data Management Specialist agency reviews
- Trade Associations
- State and Federal Agencies

MinnesotaHelp.info®
Provider Portal

| Home | Master Record | Services (3) | Locations (2) | Features | Area Served |

MNHelp Test - Consumer Review Agency 1

Services

To edit an existing Service, click on the Service Name in the list. To delete a Service, place a check in t...
Add New Service button.

Add New Service   Delete   Cancel

✓	Service Name
☐	Independent Living Skills (ILS) Training
☐	Registered Housing With Services - Assisted Living Designation
☐	Supported Employment Services (SES)

MinnesotaHelp.info® Data Sources: State and Federal

- Minnesota Department of Health (MDH)
- Minnesota Department of Human Services (DHS)
- Minnesota Housing and Redevelopment Authorities
- Housing and Urban Development (HUD)
- United States Department of Agriculture (USDA)
- Minnesota Department of Corrections

- Minnesota Pollution Control Agency (MPCA)
- Minnesota Department of Transportation (MnDOT)
- Minnesota Department of Commerce
- Minnesota Department of Education (MDE)
- Minnesota Department of Employment and Economic Development (DEED)
- Area Agencies on Aging
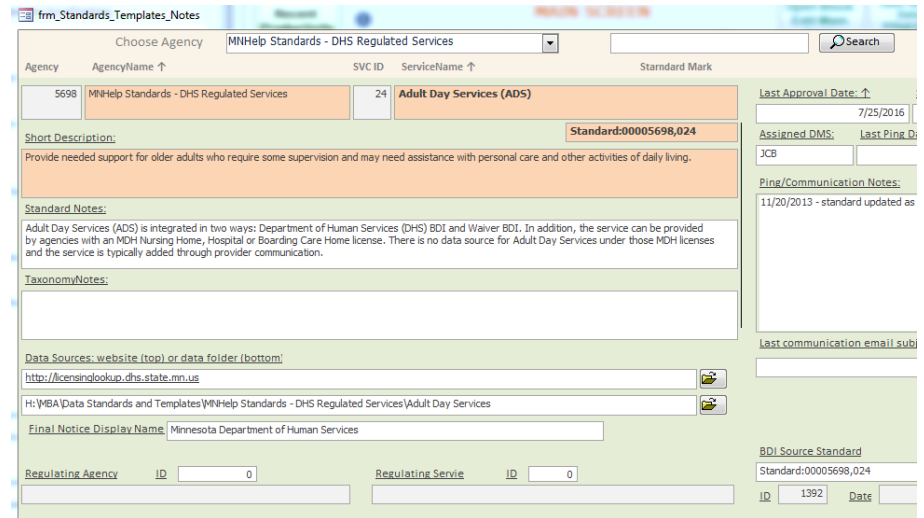
MinnesotaHelp.info® Data Sources**:** State and Federal

Data Source	Services	Data Source	Services
Minnesota Department of Health (MDH)	• Comprehensive Home Care License, Hospital, Hospice, Assisted Living, Community Mental Health Center, etc.	**Minnesota Department of Human Services (DHS)**	• Adult Day Services, Adult Foster Care, Respite, Chore Services, Supported Employment Services, Independent Living Skills Training, etc.
Housing and Urban Development (HUD) and United States Department of Agriculture (USDA)	• Subsidized and Rural Subsidized Housing for Older Adults, Persons with Disabilities & Families; Housing Counseling; etc.	**Minnesota Department of Employment and Economic Development (DEED)**	• Workforce Center Services for Job Loss, Vocational Rehabilitation, Youth in Transition, Veterans, etc.
Minnesota Department of Transportation (MnDOT)	• Annual Statewide Transit Report	**Minnesota Pollution Control Agency (MPCA)**	• Medication Disposal
Minnesota Department of Commerce	• Weatherization and Energy Assistance Programs	**Minnesota Department of Corrections**	• Ex-Offender Housing Directory

Getting the Data into **Minnesota**Help.info®

- **Standardized Services**
  - Text
  - Taxonomy
  - Features

- **Data Management Tools**
  - Data acquisition and integration tools
  - Data Manager (data editor)
  - Issue Tracking

- **Review Cycles**

Waiver Provider Standards Project

- Incorporates Minnesota healthcare enrolled providers into MinnesotaHelp.info
  - Began in 2010
  - Implemented in 2014 with the first generation of data

- Presents a uniform display of information about enrolled provider services

- Allows providers to add information about their service that will help consumers and other helping professionals compare services

Waiver Provider Services Project

- Partnership between multiple divisions
  - Provider Enrollment
  - Licensing
  - Aging and Adult Services
  - Disability Services
  - MN Board on Aging
- Monthly processing
  - 31 generations of data as of August 2016
  - 17660 records reviewed in August (programmatic and DMS review)
  - Changes are not guaranteed ever month
  - Dependent on licensing or billing changes for public programs

MinnesotaHelp.info®: Waiver Provider Services

- Integration of HCBS Waiver services begins with the Minnesota DHS Service Request Form

Minnesota Department of Human Services

Minnesota Health Care Programs (MHCP)

HCBS Programs Service Request Form

Use this form to request approval to provide the service(s) indicated or to notify MHCP that you are no longer providing the service(s) indicated.

Directions:
1. Select the service(s) that you want to provide or that you are no longer providing.
2. If you are requesting approval to provide services, select the service credential code to indicate how you are qualified to do each service.
3. If you are requesting approval to provide services, submit proof of your qualification(s) with this form.
4. Fax the completed form and any attachments to MHCP at 651-431-7462.

To process your request, we must receive the first and last page of this form and any other pages that show a service selected. You do not need to fax all pages of this document.

Select the HCBS program(s) you are enrolling to provide, the program(s) for which you are adding services, or the program(s) for which you no longer provide a service:

- HCBS Waiver
- Alternative Care (AC)
- Moving Home Minnesota
- Essential Community Supports

Choose one of the following:

- New enrollment
- Add services to an existing provider record: Effective date: __/__/__
- Remove services from an existing record: Effective date: __/__/__

Service Description	Select the credential that qualifies you for this service	Specialty Code	COS
Adult Day Services (ECS/Waiver/AC)	Choose one of the following: ○ **(AD)** Adult Day Care License under MN Rules 9555.9600 – 9555.9730 and MS, 245A.01 – 245A.17 LICENSE NUMBER: ○ **(DA)** DHS Approved (compliance with MHCP Adult Day Services Providers Applicant Assurance Statement (DHS-6189AA))	AD	102
Adult Day Services, FADS (Waiver)	**(FA)** Family Adult Day Services license under MS, section 245A.143. The home must be the primary residence of the license holder. LICENSE NUMBER:	AD	102
Adult Day Services, Bath (Waiver/AC)	Choose one of the following: ○ **(AD)** Adult Day Care license under MN Rules 9555.9600 – 9555.9730 and MS, 245A.01 – 245A.17 LICENSE NUMBER: ○ **(FA)** Family Adult Day Services license under MS, section 245A.143. The home must be the primary residence of the license holder. LICENSE NUMBER:	AB	102
Assistive Technology Equipment (Waiver/AC)	Choose one of the following: ○ **(LA)** Lead Agency (County/Tribal Human Service) ○ **(DA)** DHS Approved (compliance with MHCP waiver provider enrollment and signed Assistive Technology Providers Applicant Assurance Statement (DHS-6189D))	AT	033

MINNESOTA BOARD ON AGING
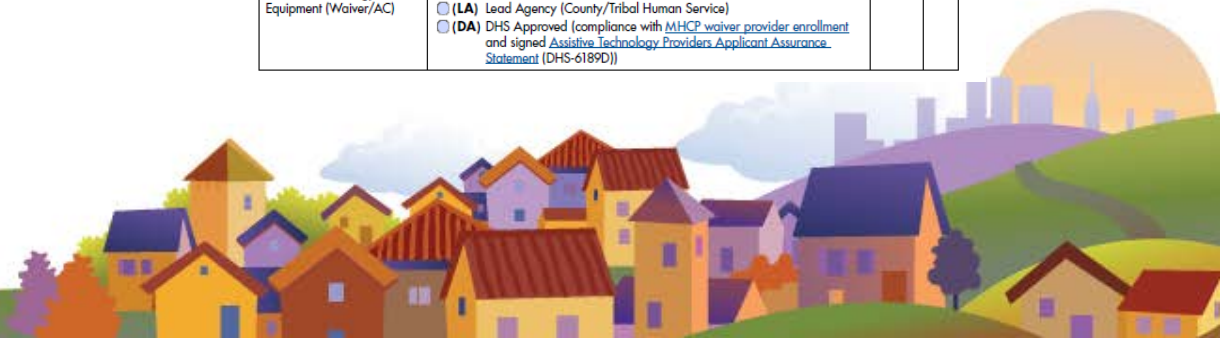
MinnesotaHelp.info®: Waiver Provider Services

COSCd	SpecialtyCd	LicenseType1	LicenseType2	MHIService	StandardMark	AdditionalTaxCode1	AdditionalTaxText1	FeatID01	FeatName01	LicensedBy	ID02_RegSer	FeatName02	WaiverEW	WaiverAC	WaiverCADI	WaiverBI	WaiverCAC
094	EA	23		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1474	Integrated Home Care License	N	N	Y	Y	Y
094	EA	23	57	24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1480	Basic Integrated Home Care License	N	N	Y	Y	Y
094	EA	23	58	24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1481	Comprehensive Integrated Home Care License	N	N	Y	Y	Y
094	EA	57		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1480	Basic Integrated Home Care License	N	N	Y	Y	Y
094	EA	58		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1481	Comprehensive Integrated Home Care License	N	N	Y	Y	Y
094	EA	CP		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	DHS	1441	Chapter 245D License	N	N	Y	Y	Y
107	EA	23		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1474	Integrated Home Care License	N	N	Y	Y	Y
107	EA	23	57	24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1480	Basic Integrated Home Care License	N	N	Y	Y	Y
107	EA	23	58	24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1481	Comprehensive Integrated Home Care License	N	N	Y	Y	Y
107	EA	57		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1480	Basic Integrated Home Care License	N	N	Y	Y	Y
107	EA	58		24-Hour Emergency Assistance for People on Disability Waiver	Standard:00012563,001			2936	24-Hour Emergency Assistance Service Plan	MDH	1481	Comprehensive Integrated Home Care License	N	N	Y	Y	Y
033	MD	DA		Accessibility Adaptations - Home	Standard:00012563,011			2938	Home Accessibility Adaptations		1461	Approved by DHS as Meeting State Standards	Y	Y	Y	Y	Y

MinnesotaHelp.info®: Waiver Provider Services

- Data from the crosswalk table is translated into Services, Features, and Taxonomy codes that are integrated into MinnesotaHelp.info®

# **MinnesotaHelp.**info®: Waiver Provider Services

- Finding HCBS services that accept waiver funding
  - Search by payment type
  - Search by service type
  - Search by National Provider Identifier (NPI) Number
- Currently there are 2557 agencies and 16,825 services integrated from the DHS Waiver Provider Enrollment data source
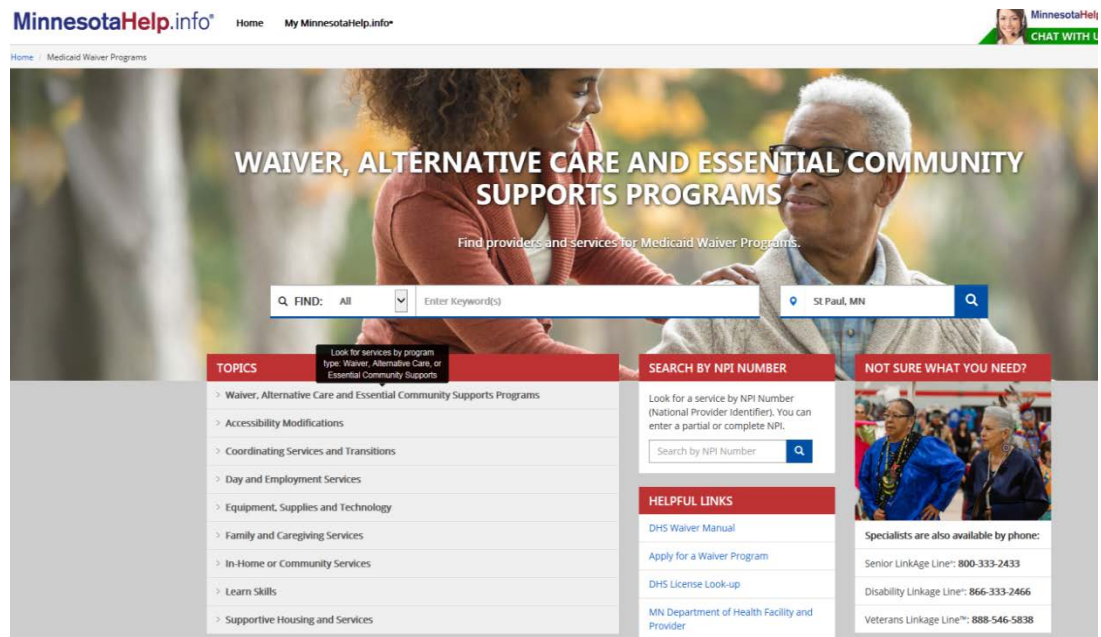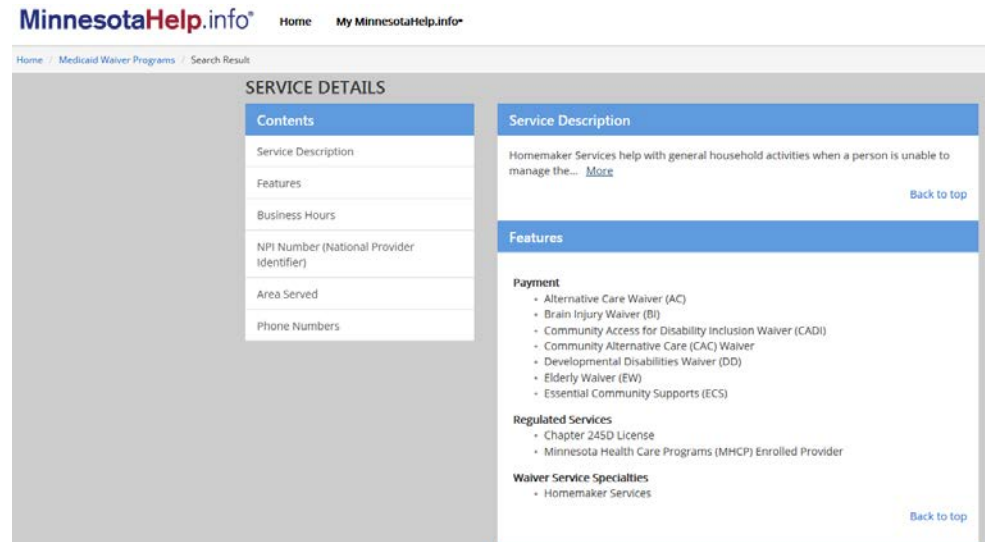
MinnesotaHelp.info®: Features

- Purpose/Function of Features

- Currently 938 features used in the database

- 161 features applied from DHS Waiver Provider Service (WPS) processing

Waiver Payment Features

Category	Value
AC	6175
BI	12820
CAC	9901
CADI	12265
DD	10325
EW	8520
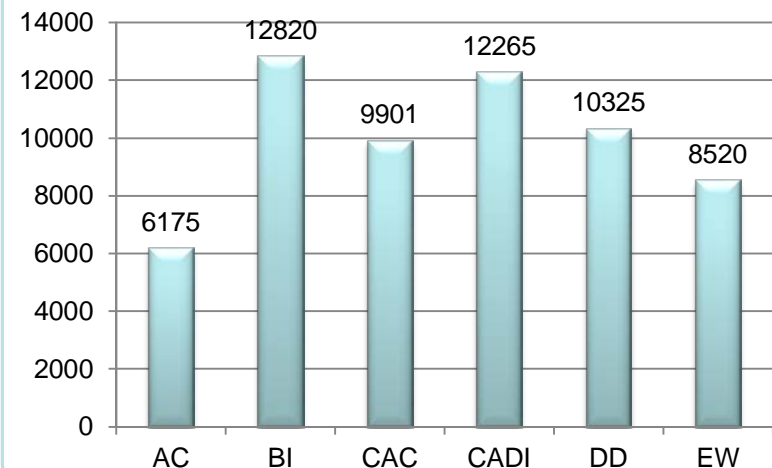
MinnesotaHelp.info®: Feature Challenges

- Internally
  - Careful consideration is needed when developing new features or repurposing existing features
  - Developing feature management strategies
- Providers – involvement in adding features
- Searchers – understanding how to use features to help find the most relevant search results

MinnesotaHelp.info®: Taxonomy

- AIRS Taxonomy
  - Challenges and constraints
    - National codes, not state specific
    - Similar branches of taxonomy codes
  - How we resolve these challenges
    - Target codes (Y Codes)
    - Creation of 'Trigger codes'
    - Creation of 'Peoples codes'

MinnesotaHelp.info®: Taxonomy Best Practices

- Developed an internal taxonomy review form in order to understand context
- Goal of no more than 5 taxonomy codes per service
- Remember to consider taxonomy hierarchy
- Consistent and well developed training for Data Management Specialists

Sample Performance Management Metrics

Average Age of Data in Days
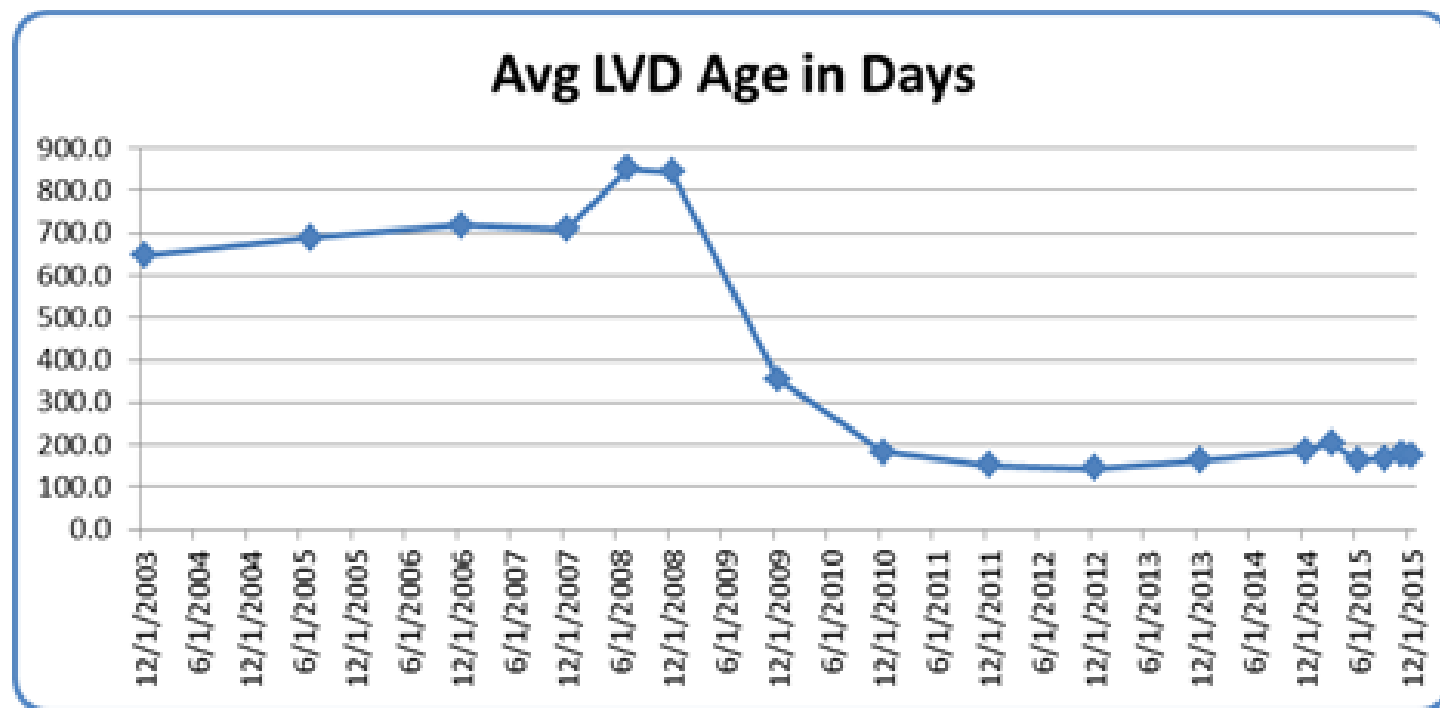
The power of standardization and external data sources
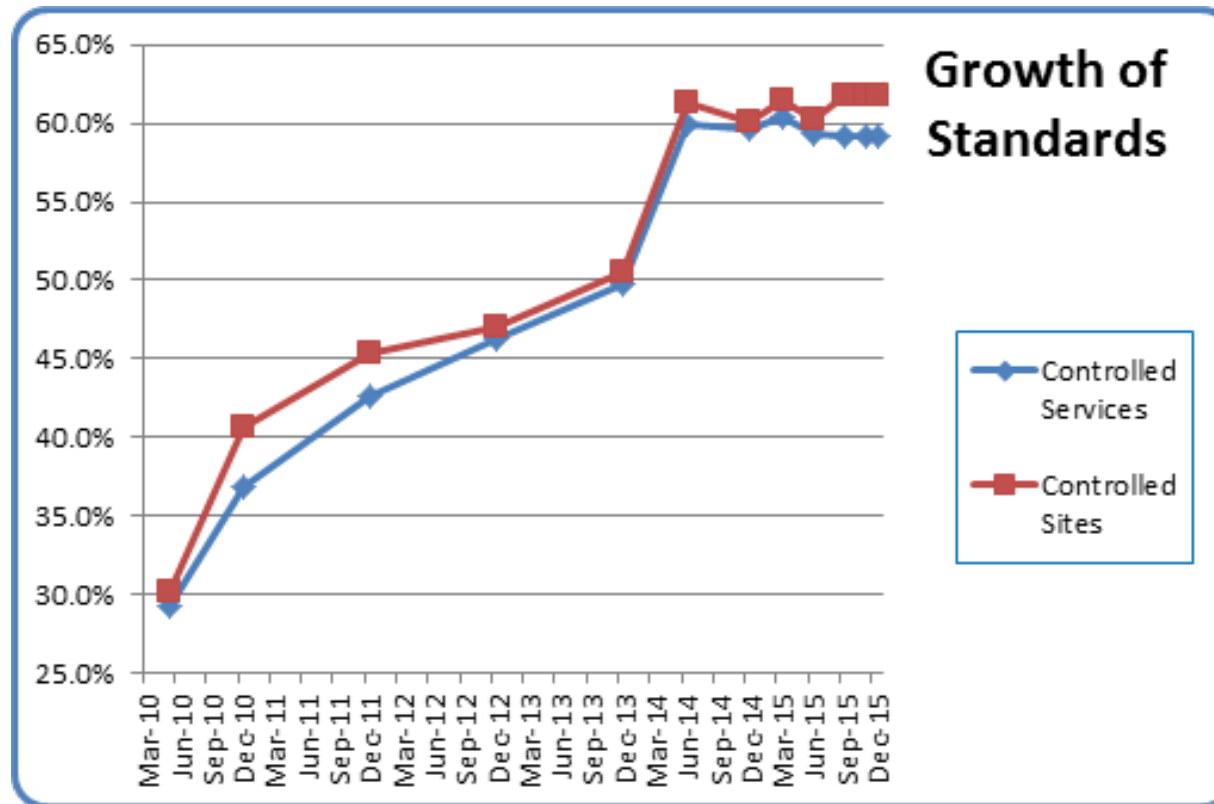
Number of Locations by Category

Num Sites per Standard Group

Category	Value
True County Standards	33
AAA, SLL, and DLL	134
Misc Gov Services	1076
FSE / FCM (Support Planners)	58
DHS Regulated Services	9032
MDH Regulated Services	5943
Misc Services	783
Misc Housing Services	3252
Out of State Regulated Services	425
City and County Services	3470
Medicare Health and Drug Plans	36
DHS Additional Waiver Provider Services	16643
Education Services	3170

North Light Software: About

- North Light Software became a wholly owned subsidiary of Revation Systems in 2014

- The two have partnered to make I&A and I&R efforts more efficient and effective

- Offer a cloud-based contact center solution to help improve access to community resources for healthy aging
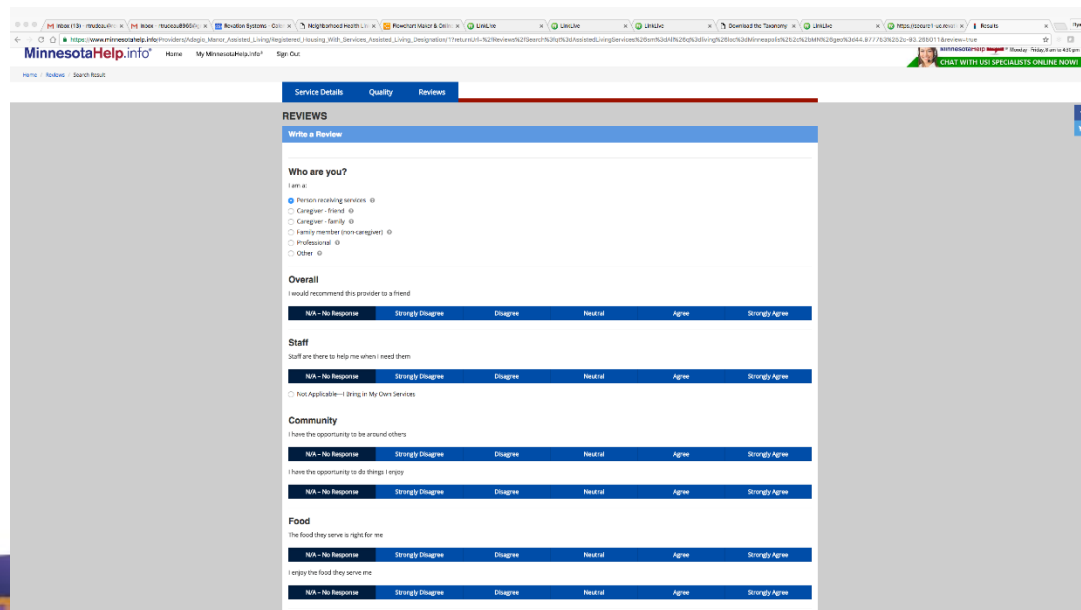
North Light Software: Product Portfolio Overview

- Public Portal: sharing information with large populations
- Provider Portal: updates to information from providers working in collaboration with the data management team
- Referral: population health case management, follow-up and work assignment
- Patient Admission Screening (PAS)
- LinkLive: cloud-based, HIPAA-compliant multimedia contact center, also provides authentication "shared credentials" to the above products

Light Software: What's New

- Provider Reviews

- Shared Sign On

- Updated Navigators

- Virtual Engagement Portal (VEP)

North Light Software: Virtual Engagement Portal

- Provides community based service organizations with a secure method to communicate bi-directionally with a wide variety of users
- Portal has many integration points including the ability to save favorite resources and look at the status of submitted service reviews

North Light Software: Markets Served

- Health and Community Based Services
  - Area Agencies on Aging (AAAs)
  - Aging and Disability Resource Centers (ADRCs)
- Banking
  - Credit unions
- Healthcare Services
  - ACOs
  - Nurse triage
  - Appointment Scheduling

Database Search Challenges

- Advantages/Disadvantages to different search methodologies
  - Area Served vs. Location-based
  - Text search vs. drill-down selection
- How data architecture improves search results and customer satisfaction
  - Use of service "Features" to filter results and improve user experience
  - Use of "special topics" to appeal to different target populations or service types

Successful Searching and Results Strategies

- Search Technologies, Inc.
  - Higher level content cleanup that "differentiates MHI from other tools" and longer term content cleanup changes
  - Add Content Processing Framework (additional tool)
  - Customized Relevance Ranking
  - SOLR Changes including Optimization
  - Refactor Search Layout
  - Widen vocabulary range including maximizing the use of the 211 taxonomy and the use of Northlight's People's Code Taxonomy which is more user friendly and lower literacy.
  - Enable Conceptual Search including Lemmatization, a synonym table of less than 100 highest used terms and

Summary of Learnings

- To have an effective web site – looks is great but good data and optimal search results is critical – that will keep them coming back.

- What a consumer wants is at times the same as or at times different than what a professional wants (it depends on how savvy the consumer is.)

- Good data equals good searches. Search algorithms work off of words first and then algorithms about works next.

- Data ain't easy. Location, location, location – consumers want to know it its close to their home and what the cost is – those are difficult to figure out. Providers want to know if there is availability and so what we want is difficult to maintain.

- Don't kid yourself – Google and YELP haven't figure it out…yet.

MinnesotaHelp.info®

QUESTIONS??

SEARCH
TECHNOLOGIES

Minnesotahelp Network

MinnesotaHelp.info Search Assessment

David Neubert

Search Technologies

August 25, 2016

Phase 1

Findings Summary

- **Atypical Content –** ~70K very small documents, most of which include standardized text descriptions, resulting in unusually high numbers of similar documents. Includes data omissions and inconsistences, some of which are impacting search.

  - **All small documents**
  - **Low content differentiation**
  - **Data omissions and inconsistences**

- **Atypical Vocabulary –** Content authored using academic and/or medical vocabulary, yet the target literacy level is a 7th grade vocabulary because audience includes both general public users, as well as academic and medical professionals.

  - **Academic/medical vocabulary**
  - **Professional users**
  - **Public users, ages 12+**

- **Solr Document Model –** is not sufficiently generalized and is missing fields helpful to search, such as entity_type, service_type, localities_served, and GRank fields (all addressed in detail). Also distinct document models for basic organizational entities such as agencies and locations do not exist.

  - **Not sufficiently generalized**
  - **Missing helpful fields**
  - **Missing organizational entity models**

Findings Summary (continued)

- **Solr Configuration Is near OTTB –** for index, search, relevance ranking, and architecture. This has not yet been an issue due to low content and query loads. However, the current Solr architecture is not scalable or reliable (no HA), and most Solr configurations are defaulted, including no customized relevance ranking or conceptual search capabilities leverage taxonomy vocabularies.

  - **Default relevance ranking**
  - **No conceptual search**
  - **No SolrCloud/HA, not scalable**

- **User Interface Functions and Layout –** is responsive and accessible. However, some basic search functions, such as searching for an agency, are not understandable. Other functions like searching for services in-home or in the right county are difficult or not possible. The UI layout on a laptop/desktop screen is scattered, with fields not clustered near their point of use. Most filters are opaque (do not reflect their state). All this combines to discourage full use of MHI search functions.

  - **Basic search functions are not obvious or missing**
  - **Scattered, opaque filters, not clustered near point of use**
  - **Filters and browse query use discouraged**

MHI Assessment
Recommendations Summary

Short Term Recommendations

- **Minimal Content Cleanup –** add new fields and clean any field that differentiates MHI content and enables search functions and results to be more understandable. Examples include: entity_type, service_type, localities_served, and GRank fields.

- **Add Content Processing Framework (CPF) –** to enable above content additions to be quickly prototyped and/or implemented without impacting DMP.   For MHI, recommended CPF is free.

- **Generalize and Optimize Relevance Ranking –** to improve search results ordering. Leverage old and new fields to incorporate new filters and query boosts that are as provider/service neutral as possible. Boost document scores based upon where and how query terms match in the document.

- **Adopt Solr Best Practices –** for backend indexing (both full and incremental), and for frontend search helper functions, such as auto-complete (type-ahead), and Did-You-Mean suggestions.

- **Optimize Solr Configuration –** to build more efficient indexes and improve memory utilization. Also move to SolrCloud (if desired) to place MHI search on Solr's currently preferred architecture, and to make it scalable, and more reliable (fault tolerant). Note that moving to SolrCloud is straight forward, but requires additional machine resources to be truly fault tolerant.

- **Refactor Search Layout –** to make search more understandable and ensure most common search functions are obvious, such as find in-home services only or agency office locations independent of services. Examples are included in this document. These are functional inhibitors, not cosmetic issues.

Recommendations Summary (continued)

Mid to Long Term Recommendations

- **Deep Content Cleanup –** perform more thorough content cleanup; push temporary changes back to DMP. Add new Solr document models that model basic organization MHI entities, e.g. agencies.

- **Widen Vocabulary Range –** maximize use of InfoLine and/or People's Code taxonomies. Two standard means exists (a) incorporate more into filters and browse topics, and (b) add taxonomy terms and phrases as keywords to documents during indexing. The latter means is generally higher LOE, but also has the potential to return much greater ROI, as it enriches conceptual search.

- **Enable Conceptual Search –** by adding (a) lemmatization, (b) a minimal synonym list for highest priority terms (< 100 terms), and (c) taxonomy vocabulary, and (d) natural language queries or question & answer capabilities. All these options are addressed in some detail in this document.

  Options (a) and (b) can be short term recommendations if implemented separately from (c) and (d).

UI Example 1

Reduce Clutter:
- No lead magnifying glass
- No Find label
- Pull down with 3 options:
  - Find (default setting)
  - Find Services
  - Find Agencies

FIND | homeless shelters | 📍 Buffalo, MN 55313 | 🔍

Refine ❓

Search Within the Results

Within 10 Miles of my location

Filters: /Services

- ❓ **Category** >
- ❓ At Home Services >
- ❓ Building Accessibility >
- ❓ Building Amenities >
- ❓ Client Conveniences >

Buffalo, MN 55313
317 Services within 10 miles; 26832 results statewide

📍 Map View | ✔ Compare/Save | ↕ Sort Results | 📤 Export Results

☐ **1. SHARING AND CARING HANDS**

Homeless Shelter
Mary's Place
401 N 7th St, Minneapolis, MN, 55405-1522
1 Miles

📱⑤ (612) 596-3421
✉ creemoore@yahoo.com
🌐 Website

Description: Mary's Place is a homeless shelter and transitional housing unit for adults with t... More

Other Services: 7 Services offered by this provider

☐ **2. SALVATION ARMY - METRO AREA**

Employment-Related **Homeless Shelter**
Harbor Light Center
1010 Currie Ave, Minneapolis, MN, 55403-1332
1 Miles

📱⑤ (612) 767-3113
🌐 Website

Description: Sh... ...n and women who are employed or seeking employme...

Other Ser...

Clean Left Hand Pane:
- All **Refiners** and **Filters**
  - In one place on left, not spread out.
  - They always update when filled in or selected
- **Refiners** – could have its own bread crumb ala Filters
- **Filters**, when selected, should either:
  - Stay open, or
  - Be visually emphasized such as with font color

Clean Right Hand Pane:
- All **Searcy Results** and **Options**
  - In one place on right
  - Visually separated
  - Scrolling can still work as desired
- **Search Summary** – at top
- **Search Options** - immediately below but clustered by line header
- **Search Results** – follow on bottom

Example UI 2

- This is a bit unusual → and may not be responsive.

Illustrates

- Ability to search *only for* agencies, services, in-home services, locations (Left most filter under the search box)

- Most commonly used filters are in one place (under the search box)

- All other (lesser used) refiners in one place on left margin

- Refiner bread-crumb just above Refiners (not far removed)

- Orange search results modifiers placed near the search results.

- Refine Search option removed

UI Example 3

Illustrates

➕ Shows Services-In-Home filter (left most menu)

➕ Shows "In" Filter (middle menu; enables searching only within a city or county)

➕ Shows "Near" feature (which could be the new default, allowing MHI to change the default distance over time without having to be to specific or repeatedly change the menu item).
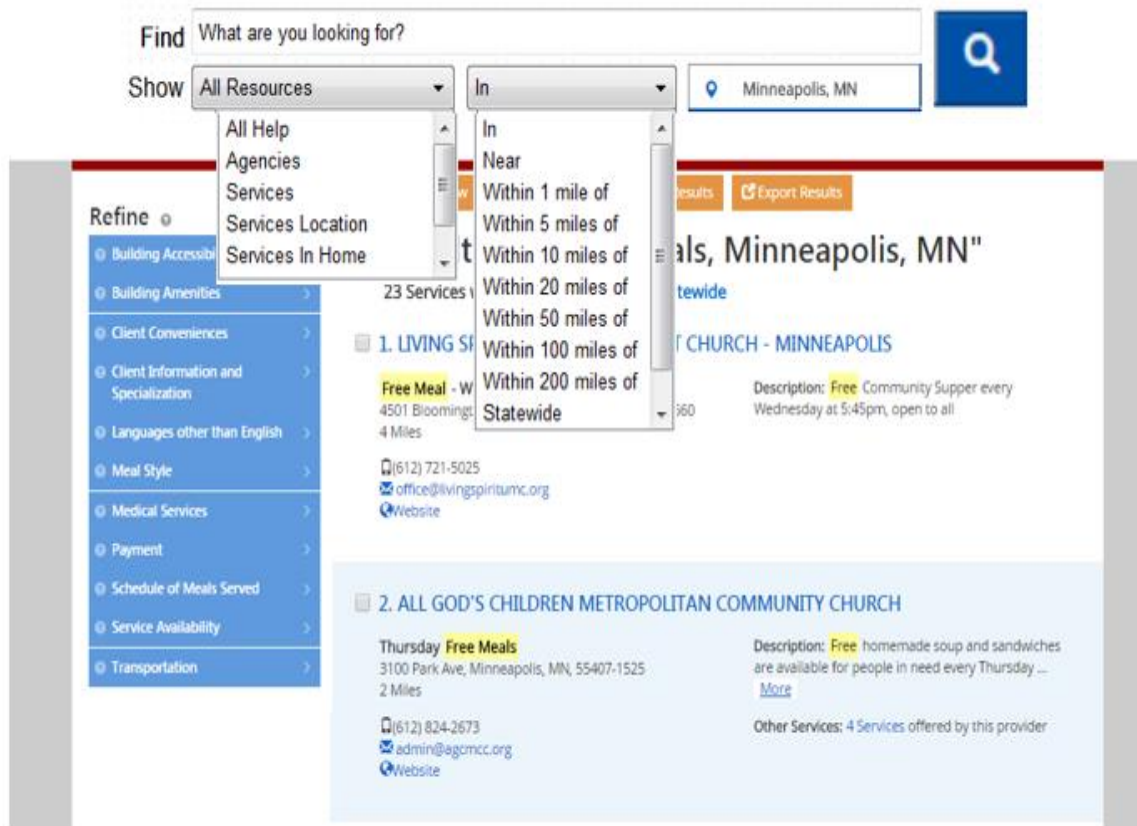
➕ Same advantages as shown in Example 2

UI Example 4

Illustrates

➕ Cleanest most Google-like layout (one search box)

➕ Most commonly used filters are in one place on left margin (under **Show** label)

➕ All other (lesser used) refiners in one place on left margin (under **Refine** label)

FIND | free meals

Results for "free meals"

23 Services within 5 miles; 86 results statewide

Show ⊙
Service Locations
Within 5 Miles of
My Location

◻ 1. LIVING SPIRIT UNITED METHODIST CHURCH - MINNEAPOLIS

Free Meal - Weekly
4501 Bloomington Ave, Minneapolis, MN, 55407-3660
4 Miles

Description: Free Community Supper every Wednesday at 5:45pm, open to all

📞(612) 721-5025
✉ office@livingspiritumc.org
🌐 Website

Refine ⊙
- Building Accessibility
- Building Amenities
- Client Conveniences
- Client Information and Specialization
- Languages other than English
- Meal Style
- Medical Services
- Payment
- Schedule of Meals Served
- Service Availability

◻ 2. ALL GOD'S CHILDREN METROPOLITAN COMMUNITY CHURCH

Thursday Free Meals
3100 Park Ave, Minneapolis, MN, 55407-1525
2 Miles

Description: Free homemade soup and sandwiches are available for people in need every Thursday ...
More

📞(612) 824-2673
✉ admin@agcmcc.org
🌐 Website

Other Services: 4 Services offered by this provider

Map View | Compare/Save | Sort Results | Export Results

➕ Refiner bread-crumb just above Refiners (not shown, but should be)

➕ Refine Search option removed (is it really used?)

➕ Orange search results modifiers placed near the search results.

Phase 2

Phase 1 Review

✓ **Phase 1 Assessment Findings**

- ▪ **Atypical Content –** ~70K very small and similar documents with standardized text descriptions.
  - Small documents
  - Low content differentiation
  - Data omissions and inconsistences

- ▪ **Atypical Vocabulary –** Content in academic/medical vocabulary; site literacy level is 7th grade
  - Academic/medical vocabulary
  - Professional users
  - Public users, ages 12+

- ▪ **Solr Document Model –** not yet generalized nor sufficiently optimized
  - Not sufficiently generalized
  - Missing helpful fields
  - Missing organizational entity models

- ▪ **Solr Configuration –** basic near OOTB with limited use of SolrCloud features and no HA
  - Default relevance ranking
  - No conceptual search
  - No SolrCloud/HA, not scalable

- ▪ **User Interface Layout and Functions –** scattered/opaque filters; missing some basic functions.
  - Some basic search functions are not obvious or missing
  - Scattered, opaque filters, not clustered near point of use
  - Filters and browse query use discouraged

Phase 1 Review

✓ **Short Term Recommendations**

- **Cleanup content – **add new fields and clean current fields to increase differentiation in MHI content.

- **Add Content Processing Framework (CPF) – **to enable robust content transforms that benefit search.

- **Generalize and optimize relevance ranking – **to improve search across all MHI content and queries.

- **Adopt more Solr best practices – **in indexing (incremental, near real time); in search (filters, helpers).

- **Optimize Solr configuration – **to build more efficient indexes and improve memory utilization.

- **Refactor search layout – **to make search more understandable and enable new search functions.

✓ **Mid to Long Term Recommendations**

- **Deeper Content Cleanup – **push temporary index transforms back into DMP db; add more MHI entities.

- **Enrich Vocabulary Range – **by incorporating MHI taxonomies classifications into all MHI search policies.

- **Enable more conceptual search features – **by adding lemmatization, a minimal synonym list for highest priority terms (< 100 terms), taxonomy vocabulary (as above), natural language queries, and or question & answer capabilities.

- **Add semi-automated tuning – **via backend engine scoring and relevance ranking driven by statistic in query logs rather than by periodic user inspection.

Phase 1 Review

✓ **Phase 1 Accomplishments**

- Completed 10 of 12 short term recommendations (deferred content cleanup and Phase 1 KT)

- Added content processing framework (Aspire)

- Added the ability to index more MHI entities (providers, locations, and points-of-service)

- Generalized MHI relevance ranking (using GRank, i.e. generic rank)

- Adopted new Solr best practices, adding incremental indexing and new search filters and helpers

- Upgraded Solr architecture and configuration – to latest SolrCloud 6.1; enabled high availability (HA)

- Optimized Solr schemas to build more efficient indexes and improve memory utilization

- Assisted in recommendations to make MHI search more understandable with new search features.

Phase 2 Summary

✓ **Phase 2 Accomplishments** (to date, before testing)

- Designed MHI Vocabulary Enrichment Plan and Blue Print (see below)

- Implemented MHI Vocabulary Enrichment Plan and Blue Print

  - Added MHI taxonomy related content back into new generalized SolrCloud schema

  - Added MRank (high/med/low rank metadata) scheme to parallel GRank (high/med/low text)

  - Extended new GRank-based relevance ranking policies to include MRank classifications

- Incorporated InfoLine, Peoples and MHI browse topics into the above plan

- Made GRank policies scriptable and configurable (change policies without re-indexing or recompiling)

- Provided a minimal/initial GRank Test App to test/tune Grank policies before incorporating into MHI.

MHI Assessment
Phase 2 Summary

- **Phase 2 Outstanding Goals** (as of 8/26/2016)

  - **Test and tune policies** (largely a MHI task ☺; but assisted by STC and Revation)

  - Incorporate Phase1 and Phase 2 deliverables into new MHI application (Revation)

  - Plan Phase 2 deployment infrastructure (will it be HA? how many servers?, etc.)

  - Deploy new MHI application (including all of the above)

GRank Summary

GRank – What is it? Why use it? What does it do for us?

- It's a generalized approach to ranking search results (aka relevance ranking)

- It's applicable to a virtually any content

- It separates the relevance ranking scheme from the query

- Making it also applicable to a wide range of user queries

- Its admin scriptable, meaning relevance ranking policies can now be changed by configuration without the need to re-index content or recompile code

- It enables simple queries to be embellished in the backend to leverage ranked metadata and text thereby improving relevance ranking

- Its needed for MHI to incorporate MHI taxonomy classifications into search relevancy instead of primarily being used only for MHI browse functions.

GRank Summary

Example GRank Query   p1 = grank1:(ps all min)^10
                              grank2:(ps all min)^5
                              grank3:(ps all min)^2
                              text:(ps all min any^0.5)

No Worries – this is all explained in the next few slides ☺

But in summary it means, boost document scores by

- By 10, when the query terms match as a phrase, all terms, or a minimum % of terms in field grank1 (the generic field that has indexed higher value boost-able content).

- By 5, when the query terms match as a phrase, all terms, or a minimum % of terms in field grank2 (the generic field that has indexed medium value boost-able content).

- By 2, when the query terms match as a phrase, all terms, or a minimum % of terms in field grank3 (the generic field that has indexed lower value boost-able content).

- Do the same in field text (a catch all field for all text), but add a match for any term, and apply no boost.

- And we will see later that any of the *ps, all, min, any* can have their own specific settings (instead of defaults) such as ps2^5.0 (allow 2 terms between matching terms and boost by 5.0)

GRank Summary

- **GRank –** or Generic Rank is powerful relevance ranking technique based upon a simple idea to map content during indexing into high, medium, and low buckets (or index fields). Then at query time, documents are boosted accordingly when query terms or phrases match in the respective GRank fields.

  - **High/Med/Low Buckets**
  - **Easily scripted**
  - **Applies universally to virtually any content**

- **GRank Buckets –** during content processing at index time, high/med/lower boost-able content is directed and indexed into an appropriate high/med/low GRank bucket. Note that even the low bucket is still a boost in document score over an otherwise un-boosted match in the document content.

  - **High Bucket –** specific titles, names, topics, key words, metadata, etc.

  - **Medium Bucket -** generic keywords, topics, metadata, etc.

  - **Low Bucket**– other text and/or descriptions to promote over general text

Original Source Document   **Indexed Document with GRank Fields**
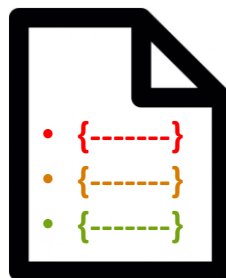
- **GRank1** – High Boost Content
- **GRank2** – Medium Boost Content
- **GRank3** – Low Boost Content

MHI GRank Mappings (for POS queries)

GRank1	GRank2	GRank3	Text
• name • aka • covers	• keywords • mrank1	• description • mrank2	• grank fields • mrank3 • mrank4

e_name	ServiceName or ProviderName or LocationName
e_aka	ServiceAKA or ProviderAKA or LocationAKA
e_covers	Just for POS. Value TBD, city and zip code for now
e_keywords	Just for POS. Resource.ServiceKeyword.Keyword
e_descr	Service.FullDescription or Provider.FullDescription or Location.Description
mrank1	Taxonomy.TaxonomyLanguage.TaxonomyText Taxonomy.UseReference.UsedFor Taxonomy.TaxonomyLanguage.TaxonomyDefinition of the taxonomy code current service has
mrank2	Same with mrank1, but the values are from the parent taxonomy code of current service.
mrank3	Same with mrank1, but the values are from the grand-parent taxonomy code of current service.
mrank4	Same with mrank1, but the values are from all rest ancestors taxonomy code of current service.

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MHI Assessment

GRank Query Types

Term	PS Phase-Sequence	All aka AND	MIN aka MSM	Any aka One/OR
• boost	• slop • boost	• slop • boost	• msm • boost	• boost

Type	Description
PS	**Phrase-Sequence Match** • **ps2^5.0** -> phrase or sequence match, 2 noise word tolerance (slop), boost of 5.0
All	**All Terms Match** • **all5^2.0** -> all terms match, 5 noise word tolerance (slop), boost of 2.0
Min	**Minimum Should Match** • **min60^1.0** -> minimum 60% of terms must match for a boost of 1.0
Any	**Any Word Match** • **any^0.5** -> if any term matches in the given field, boost by 0.5
Term	**Single Term Match** • **term^0.5** -> for single term queries, boost by 0.5 if the term matches in the GRank field.

GRank Field Queries (for one field)

- **GRank Field Queries – ** apply to one field only and combine a GRank field name, one or more GRank query clauses and an optional overall field boost.

One Field GRank Query

- field name
- query clauses
- optional field boost

Examples

For boosting hits in field GRank1
- **grank1:(ps2^5 min60^1.5)^10** -> field=grank1; two query clauses: phrase, min; additional overall field boost=10

For boosting hits in field GRank1
- **gr1:(p2^5 m60^1.5)^10** -> same as above, but using shorthand notation

For boosting hits in field GRank2
- **grank2:(ps5^2 min50^1.5)** -> similar to above with different slop, msm, and boost values and no overall field boost

For boosting hits in field GRank3
- **gr3:(ps5^2 min50^1.5)** -> same as above, using shorthand notation for the GRank fieldname only

GRank Queries

- **GRank Queries** – combine one for more GRank Field queries that define how query matches in the different GRank fields should boost document scores.

Examples
For boosting hits in field GRank1 and text
• **grank1:(ps2^5 min60^1.5)^10 text:(ps min)** ← use default values for PS and MSM in the text field
For boosting hits in field GRank1 and GRank2 using shorthand notation
• **gr1:(p2^5 m60^1.5)^10 gr2:(p5^2 m50^1.5)**
For boosting hits in field GRank1, GRank2, and GRank3
• **gr1:(ps2^5 min60^1.5)^10 gr2:(ps5^2 min50^1.5) gr3:(ps5^2 min50^1.5)**
For boosting hits in fields GRank1,2,3 and text
• **grank2:(ps5^2 min50^1.5)** -> similar to above with different slop, msm, and boost values and no overall field boost
GRank query using three GRank fields, text and all GRank query types.
Note this is not a practical GRank query example , but illustrates a wide range of GRank query features.
• **gr1:(ps2^5 all5^2 min50^1 any^0.5)^10 gr2:(ps2^5 all5^2 min50^1 any^0.5)^5 gr3:(ps2^5 all5^2 min50^1 any^0.5)^2 text:(ps2^5 all5^2 min50^1 any^0.5)**

GRank Query Policies

- **GRank Query Policies –** are simply predefined named GRank queries that have been set up for you organization.   You will need to contact your site or application administrator for a list of available GRank query policies. They typically have sort names, such as p1, p2, as most organization will settle on one or few GRank query policies. They can be executed by simply adding &gr=p1 to the user query.

Examplee

To execute a GRank policy named "p1":
- **http://host:port/solr/....&q="my query"&gr=p1** ← invokes GRank policy p1 using the user query in the q parameter.

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Feature Category	# of Features in the Category	Examples of Features
At Home Services	33	• Caregiver respite • Help with shopping
Building Accessibility	10	• Designated disability parking
Building Amenities	42	• Community room
Chemical Dependency	8	• Residential treatment
Child Foster Care Placement	6	• Emergency care
Client Conveniences	24	• 24-hour on-site awake staff • Individualized care plan
Client Information and Specialization	37	• People with low income • Older adults with disabilities
Contracted/Grant Services	4	• VA contracted Nursing Home
Controlled Access and Safety Features	16	• Building-wide emergency response system
Credentials/Qualifications of Enrolled Waiver Providers	47	• Accessibility Specialist • Certified Aging-in-Place Specialist
Dietary Needs	23	• Renal (kidney-friendly) diet
Dietary Preferences	19	• Dietary Law – Kosher
Education Schedule	1	• School provided year round
Employment Assessments	2	• Individualized work related assessment
Employment Skills	11	• Resume writing
Health and Personal Management Skills	6	• Prepare for medical emergencies
Household Management Skills	8	• Meal planning • Wash and care for clothes
Housing Building Types	6	• High-rise building
Housing Resources Training	3	• Understand the rules of public housing
Housing Unit Accessibility	10	• Accessible kitchen • Roll in shower
Housing Unit Amenities	45	• Garage parking • Laundry room
Housing Unit Types	11	• 1 bedroom unit
Interpersonal and Communication Skills	4	• Problem solving
Job Coaching	3	• One-on-one on site job coaching
Languages other than English	77	• Spanish
Legal Information	7	• Advance medical directives • Housing discrimination assistance
Leisure and Recreation Skills	2	• Plan schedule social activities

MinnesotaHelp.info®

Feature Category	# of Features in the Category	Examples of Features
Meal Style	6	• Congregate meals
Medical Services	88	• Dementia care • Wound care
Medical Specialties	21	• Geriatric medicine
Medical Staff Availability	9	• Nursing staff available days • Nursing staff available on call
Memory/Dementia Care	3	• Caregiver supports and resources • Dementia trained staff
Mental Health Services	25	• Geriatric counseling
Money and Asset Management Skills	7	• Bills and debts
Ongoing Education	2	• Retraining for a Job
Organizational Association	9	• Christian – Lutheran • Islamic
Payment	41	• Alternative Care Waiver (AC) • Free / no cost to eligible clients
Peer Review Designation	3	• MN Board on Aging - Special Recognition Award
Personal Care	14	• Dressing
Personal Safety Skills	3	• Proper use of tools and equipment
Pets	12	• Allows dogs over 20 pounds
Regulated Services	81	• Adult Foster Care Type – corporate • Medicare Certified
Schedule of Meals Served	7	• A La Carte
Self-Advocacy Skills	3	• Individual advocacy and training
Service Availability	9	• Overnights
Service Location	2	• Within the community where you live
Specialized Cognitive Care Program	4	• Care for persons with a traumatic brain injury
Specialized Physical Care Program	5	• Parkinson's disease
Support in the Workplace	4	• Assistance to adapt and accommodate work sites
Time Management Skills	3	• Use a calendar appropriately
Transition Services	3	• Household Supplies
Transportation	33	• Lift access
Waiver Service Specialties	76	• Homemaker Services • Vehicle Accessibility Adaptations

MinnesotaHelp.info®

Most Common Taxonomy Codes Used in the HCBS MinnesotaHelp.info® Waiver Link

Taxonomy Code	Taxonomy Name
AC-400	Customized Living Services
AR-600	Night Supervision Services
BD-5000.3500	Home Delivered Meals
BH-3000.3500	Home Barrier Evaluation/Removal Services
BH-5000	Moving Assistance
BH-8400.6000-040	Adult Residential Care Homes
BT-4500.6500-170	Disability Related Transportation
BT-4500.6500-800	Senior Ride Programs
IA-280	Specialist Services
LF-4900.1900	Evaluation for Assistive Technology
LF-4900.6200	Nutrition Assessment Services
LH-0600	Assistive Technology Equipment
LH-0600.0100-900	Vehicle Adaptation Services
LH-0650.0700	Assistive Technology Expense Assistance
LH-2700.6000-170	Dietary Services
LH-5000	Medical Equipment/Supplies
LR-1570.2000	Brain Injury Rehabilitation
LR-3100.3300	In Home Developmental Disabilities Habilitation Programs
LR-3200	Independent Living Skills Instruction
ND-2000.6600	Prevocational Training
NL-3000.1900	Family Caregiver Subsidies
NL-5000.3300	Intermediate Care Facility/DD Transition Financing Programs
NL-5000.6500	Nursing Home Transition Financing Programs
OA-300	Older adults
OG-325	Families of people with disabilities
OJ	People with disabilities & health conditions
OV-400	Families
PH-0800	Caregiver Training
PH-1000	Case/Care Management
PH-1400.5000	Mentoring Programs
PH-1400.5000-050	Adult Mentoring Programs
PH-1800.6260	Personal Alarm Systems
PH-3300.3000	Homemaker Assistance
PH-6300.1900	Foster Homes for Children With Disabilities

Taxonomy Codes Used

Classification Taxonomy Code	
Trigger Code	
People's Code	

Taxonomy Code	Taxonomy Name
PH-7000	Respite Care
RD-1000	Behavioral Learning Therapy
RP-1400.8000-145	Caregiver Counseling
RP-8000	Supportive Therapies
SH-040.070	24-Hour Emergency Assistance
YB-9000	Young Adults
YF-1800	Developmental Disabilities

n4a Policy Update

Autumn Campbell

**Information & Referral/Assistance Summit Agenda
HCBS Pre-Conference Intensive**
August 29, 2016
Washington, DC

National Association of Area Agencies on Aging

Livable
Communities
Collaborative

Discussion Topics

- Older Americans Act

- Budgeting Process & FY 2017 Appropriations

- Other Policy Trends/Opportunities

Older Americans Act Reauthorization

Older Americans Act (OAA)

- Summer of 1965, alongside Medicare and Medicaid

- Created the National Aging Network (AAAs designated in 1973)

- Remains the foundational core of the Network's work today

- Most of Act applies to those age 60 and older; also targets services to most frail and vulnerable, as well as special populations: veterans, minority, low-income, limited English proficiency

Recently Reauthorized!
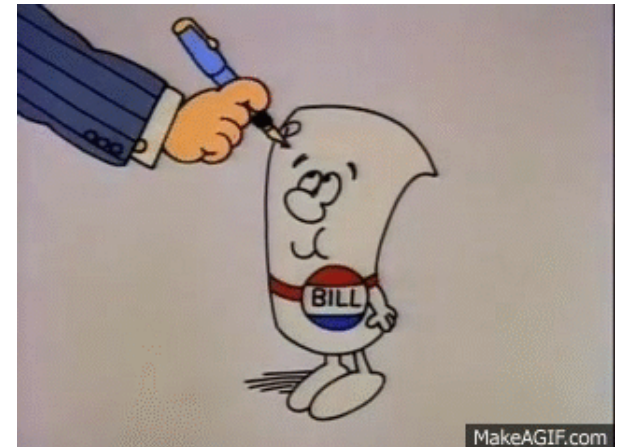
Timeline of Major Amendments

1965

1972 – Nutrition program

1973 – AAAs created; multipurpose senior centers and community service employment authorized

1978 – Home –delivered meals authorized and ombudsman services required

1992 – Elder rights recognized

2000 – National family caregiver support program

2006 – HCBS systems thru ADRCs; evidence-based health promotion services

2011
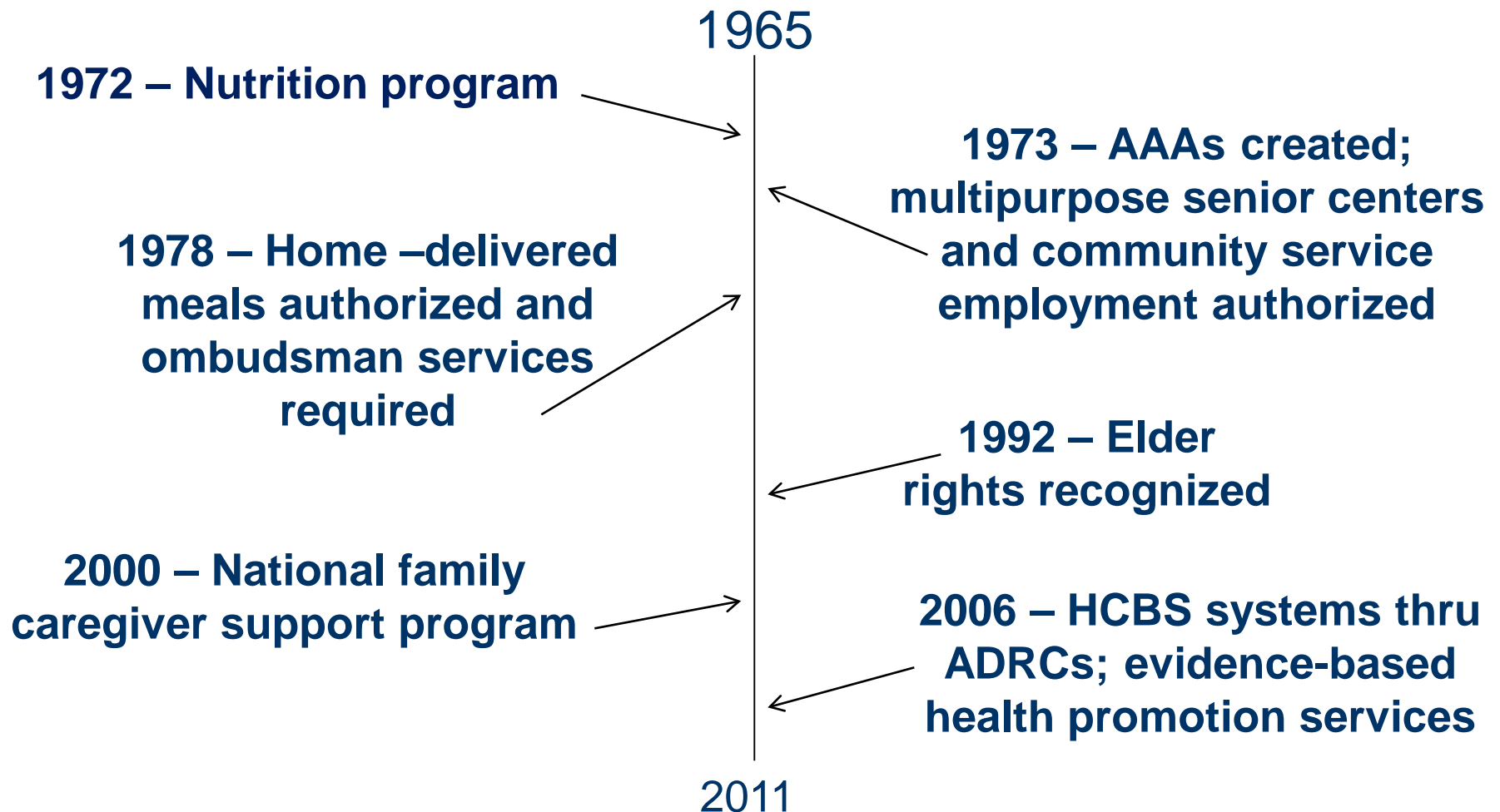
Older Americans Act 2016 Reauthorization

OAA Reauthorization Summary

- Advocates: 1-2 years getting ready
- Senate Dems: 2 years developing big, bold bills
- Senate Ds & Rs:
  - 5 months developing bipartisan bill
  - 15 months derailed over funding formula
  - 7 more months to move through committee, floor (days after 50th anniversary)
- House: 7 months to amend Senate bill, pass on floor
- Less than 1 month into pass into law

What's in OAA Final Bill?

- Reauthorizes the OAA through 2019
- Maintains local flexibility
- Authorization levels based on current approps, with average of 6.77 percent growth over three-year period (bit more for III B, C, D)
- Updates definitions of "adult protective services," "abuse," "exploitation and financial exploitation," and "elder justice"
- Updates the definition of "Aging and Disability Resource Center," including an emphasis on independent living and home and community-based services
- Reinforces the recent ACL Ombudsman regulations
- Clarifies current law that older adults caring for adult children with disabilities and older adults raising children under 18 are eligible to participate in NFCSP
- Emphasis on Evidence-based Programs, preventing fraud and abuse, and health and economic welfare
- Modest updates to Title V to conform with WIOA

OAA Title III Funding Formula

- Updated Law as of April 19, 2016
  - III B, C and D use same formula
  - *III E uses population 70 and older
  - 3 factors:
    - Share of population 60 and older*
    - Minimum grant (1/2 of 1% total approp)
    - Dynamic hold harmless (NEW)

Source: Leadership Council of Aging Organizations Fact Sheet and n4a

Dynamic Hold Harmless

- Compromise maintains concept of a hold harmless (HH) "floor" to protect baseline levels of funding to states with slower-growing aging populations but incrementally moves money to the fastest-growing states.

- Changes the HH floor from the "no lower than FY 2006" approach to a "no state gets less than 99% of previous year's allocation" approach (for 3 years).

- Only a three-year reauthorization b/c of the HH issue.

- After 3 years are up, HH floor is reset to final year's appropriations levels (e.g., FY 2019), until Congress addresses this issue again in that reauthorization process.
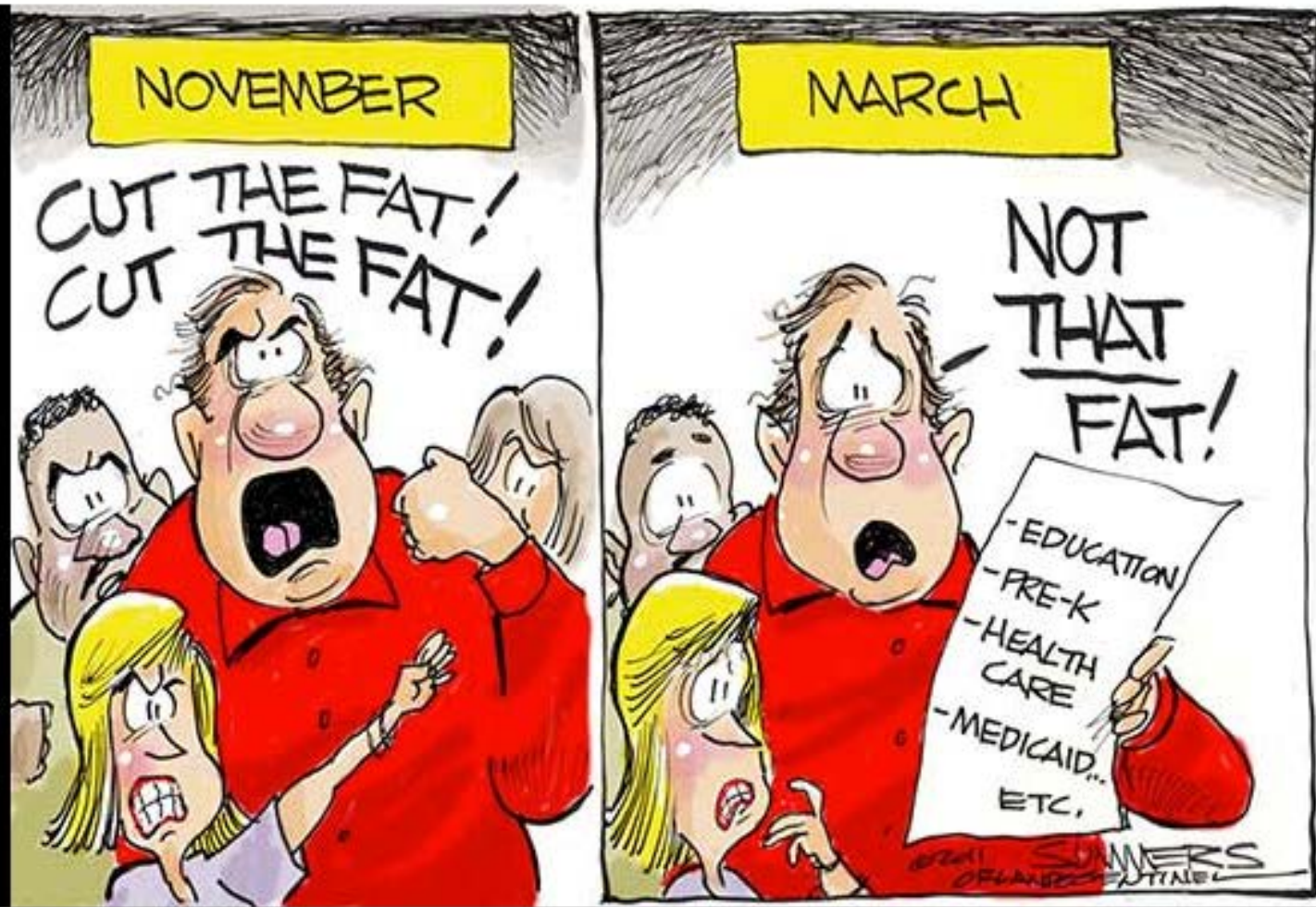
One Marathon Down…

OAA will up be for reauthorization again in 2019.

Federal Budget Process

Federal Spending by Budget Function, Fiscal Year 2015

Net interest 6%

Health 13%

Income security 13%

Medicare 14%

Social Security 23%

National defense 15%

Remaining programs
15% (Includes: agriculture, energy, general government, international affairs, veterans' benefits and services, etc.)
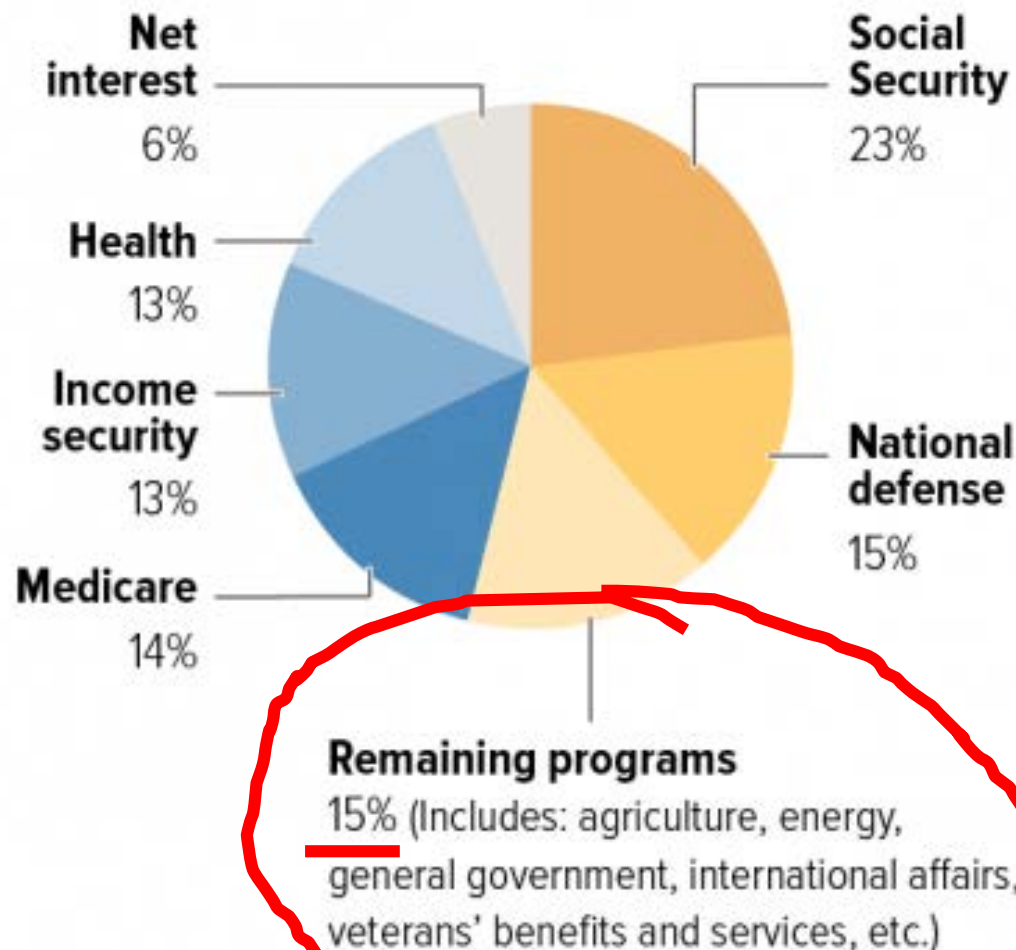
Note: Figures do not add to 100 percent due to rounding.
Source: Office of Management and Budget

Or put another way...

NDD Programs (aka "the 15%") Hit Especially Hard

Three Waves of Cuts in Non-Defense Discretionary Programs Since 2010

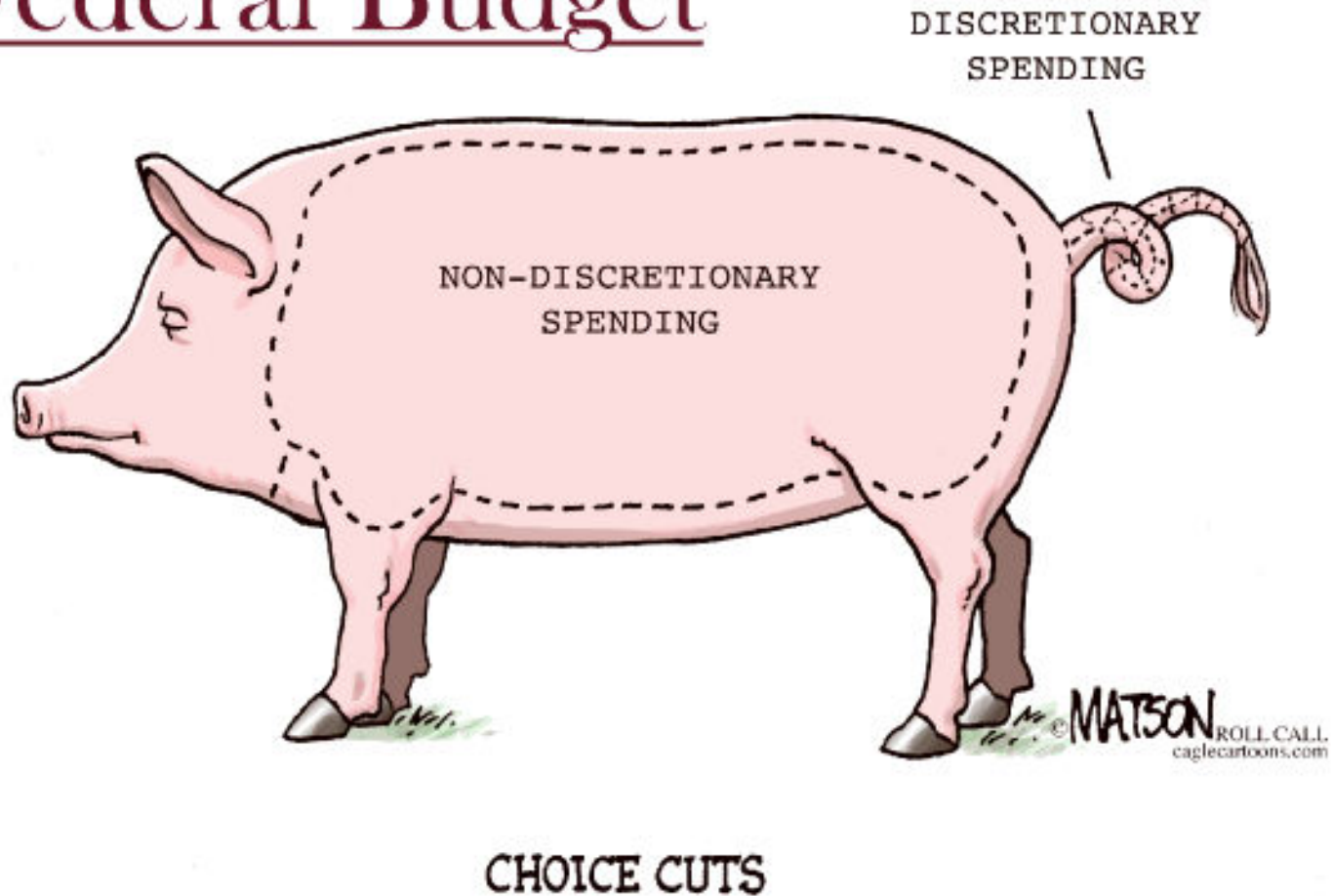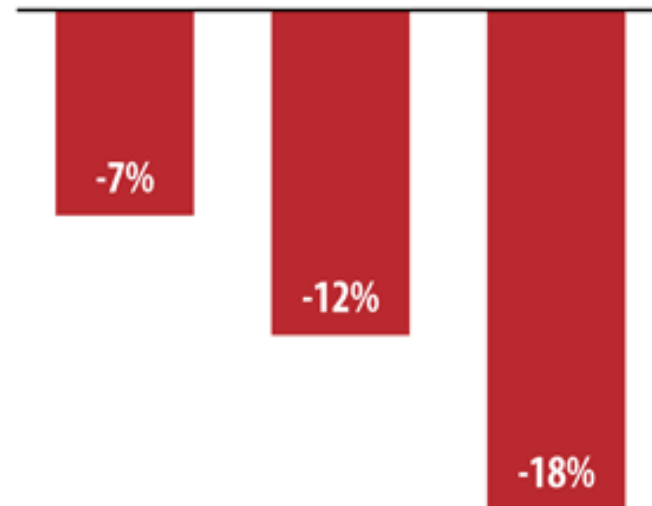Percent cut in non-defense discretionary programs relative to 2010 appropriations, adjusted for inflation

FY11 appropriations (adjusted for inflation)	*BCA level for FY14 pre-sequestration	*BCA level for FY14 post-sequestration
-7%	-12%	-18%

*Budget Control Act of 2011.

Source: CBPP calculations based on Congressional Budget Office data

Center on Budget and Policy Priorities | cbpp.org

Non-Defense Discretionary Spending, FY 2015

Diplomacy and international affairs
9%

Law enforcement and governance
11%

Science, environment, and energy
12%

Economic security
14%

Health care and health research
21%

Transportation and economic development
18%

Education and training
15%
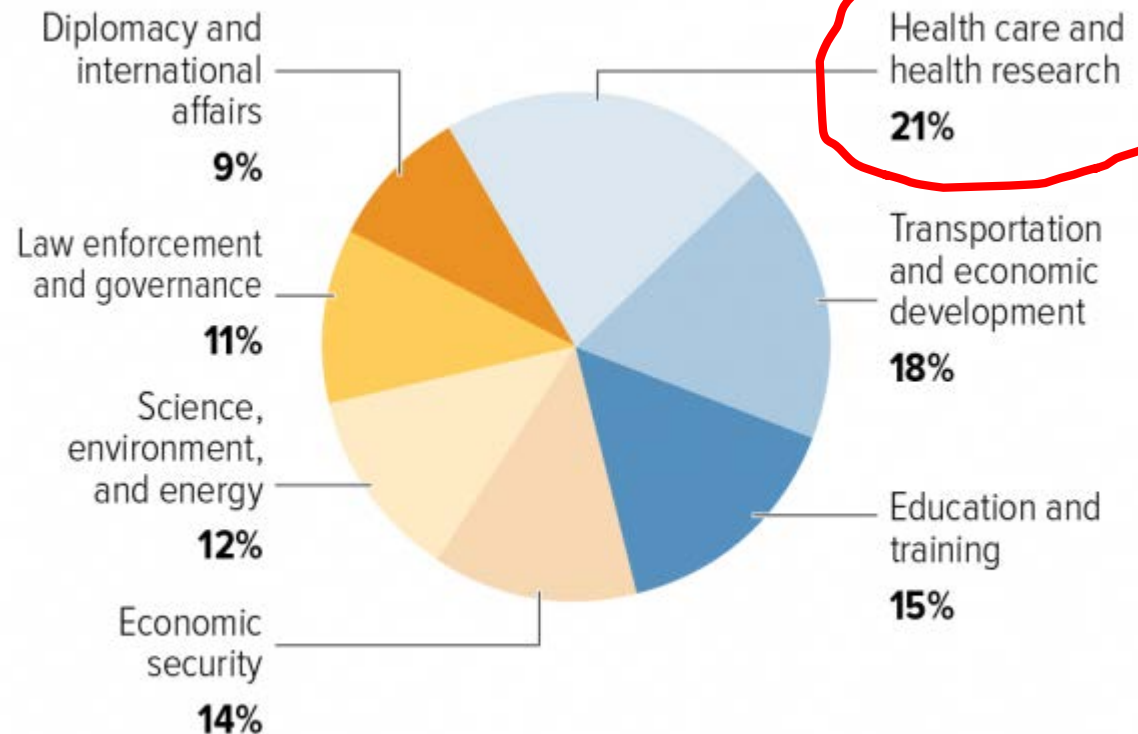
Source: CBPP calculations using Office of Management and Budget data

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

Budget Battles, 2011-2016

- Recession, changes in politics drove louder conversation about federal debt (and deficit)
- July 2011: Budget Control Act = caps, threat of sequestration, Super Committee, debt ceiling relief
- March 2013: Sequestration
- October 2013: Shutdown
- Series of two-year budget deals, partially offset sequester/caps
- Result? More than $4 trillion in deficit reduction

FY 2018: Deal Expires

In billions of 2016 dollars

Enacted | BCA caps, with sequestration

2010: $586
2011: $526
2012: $510
2013: $473
2014: $498
2015: $497
2016: $518
2017: $508
2018: $493
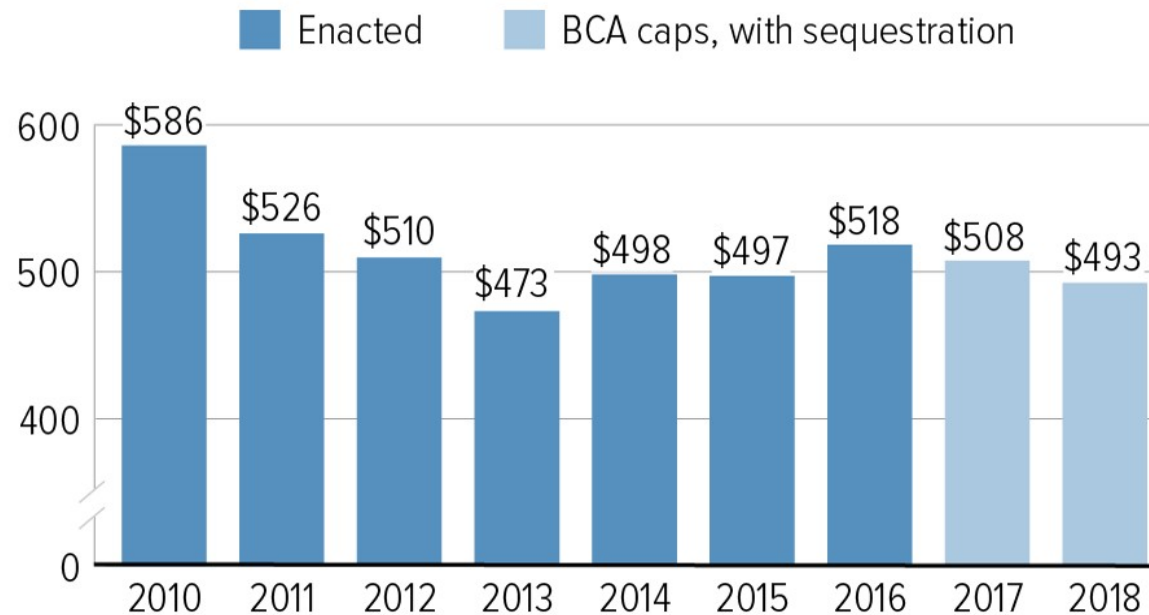
Notes: Sequestration refers to budget cuts required under the 2011 Budget Control Act, and includes modifications made in the Bipartisan Budget Acts of 2013 and 2015. The 2010 level does not include any 2009 Recovery Act funds.
All amounts exclude funding for disasters, emergencies, program integrity, and Overseas Contingency Operations (OCO).
Source: CBPP analysis of data from the Congressional Budget Office and the Office of Management and Budget

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National Association of Area Agencies on Aging

The Last Budget Deal

- October 2015 Budget Deal
  - Lifted deft ceiling through March 2017
  - **Included partial sequester relief in FY 2016 and 2017**
  - Even with the sequestration relief provided, FY 16 funding for domestic programs is 12% below the 2010 level, adjusted for inflation.
  - By 2017, domestic spending will fall to its lowest level on record as a share of the economy, with data back to 1962.

Despite Skyrocketing Senior Population, Older Americans Act Funding Fell

Senior Population (60+)
Older Americans Act Funding

69 Million
46 Million
$2.3 Billion
$1.9 Billion
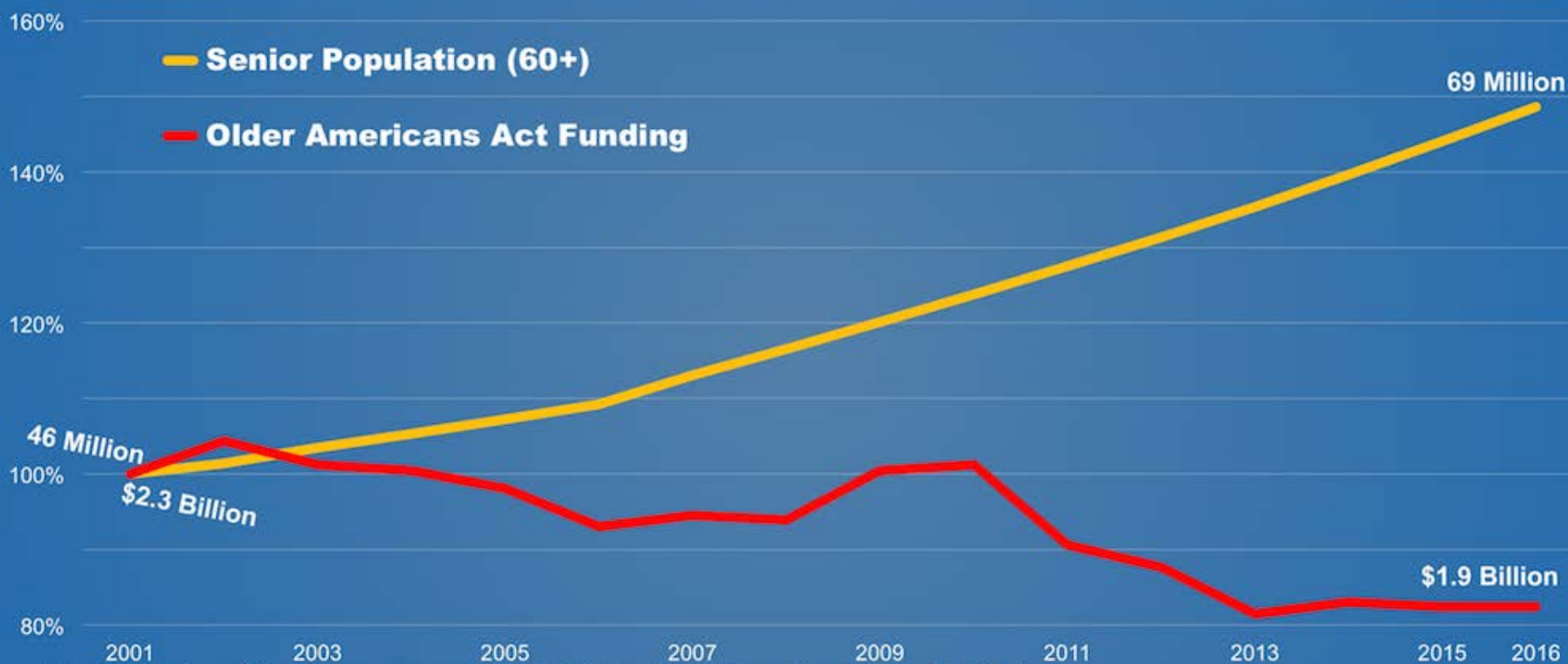
Note: Older Americans Act funding was measured using 2016 inflation-adjusted dollars, inflated using the CPI-U-RS. The funding and population are each expressed as percents of the 2001 values.
Source: Calculations from Older Americans Act historical funding, Census population estimates

National Association of Area Agencies on Aging

Appropriations

Status of Appropriations Bills

- SENATE: 12 bills out of full committee, 3 passed on floor action
  - Labor-HHS bill passed full committee on June 9

- HOUSE: 12 bills out of full committee, 5 bills passed on floor
  - Labor-HHS bill passed full committee on July 14

OAA III B Supportive Services

- n4a Actions
  - Top priority among appropriations goals
  - Bonamici-Murphy letter, 49 signatures
  - III B Fact Sheet

- Messages
  - There's been not one dollar of sequestration restoration to III B
  - Has been cut/eroded down to ~FY 2004 level

Other Appropriations Asks

- OAA, especially Titles III E Caregiver, VI Native American and VII Ombudsman

- ADRCs

- Elder Justice (funding for APS)

- SHIPs

- National Aging and Disability Transportation Center

- Chronic Disease Self-Mgmt. & Falls Prevention

Senate Labor-HHS Approps Bill

OAA and Other Aging Programs

- SHIP, *eliminated!*
- Title V, SCSEP, ⬇1%/$34 m ($400 m)
- Title VI, Part A, nutrition/services, ⬇16%/$5 m ($26.2 m)
- Core Title III B, C, E Programs, level-funded at FY 2016
- Elder Justices Initiative, ⬆25%/$2 m ($12 m)

House Labor-HHS Approps Bill

OAA and Other Aging Programs

- SHIPs, fully funded at FY 2016 levels ($52.1 m)

- Title V, fully funded at FY 2016 levels ($434 m)

- Title VI, Part A, nutrition/services, ⬆<1%

- Title III B Programs, ⬆1.5% ($5 m)

House Labor-HHS Approps Bill

OAA and Other Aging Programs

- Title III C, Congregate Meals, ⬆1.2% ($454 m)

- Title III C, Home-Delivered Meals, ⬆3.4% ($234 m)

- Small increases for other core OAA Programs

- Elder Justice Initiative, level funded at FY 2016 levels

Opportunities

- Better systems, programs, changing healthcare paradigm
- Caregiver support
- ✓ Adjust our public policy and public spending to reflect need, priorities
- Livable Communities
- Volunteerism, civic engagement
- Intergenerational engagement, programming

Community-Based Services and Supports

Health Care Industry & Medicalized Models of Care

National Association of Area Agencies on Aging

Recent (Paradigm-Shifting) Initiatives

- <u>HCBS settings rule</u> means new requirements for Medicaid LTSS for HCBS

- <u>Managed Care Regs</u> Released (April 25)

- CMS <u>discharge planning</u> regs (January comments)

- CMS <u>Accountable Health Communities</u> (March & May letters)

- Money Follows the Person (<u>MFP</u>); Balancing Incentive Payment Program (<u>BIP</u>); Community-Based Care Transitions Program (<u>CCTP</u>); Diabetes Self-Management Education Program (<u>DSME</u>)

- <u>General interest from CMS/CMMI</u> in understanding/working with social services entities and networks

Social Determinants of Health

Administrative Activity

- Final year of Obama Administration = lots of rules and regulations being promulgated

- Final implementation of Affordable Care Act, other Admin. priorities (home care workers, overtime, etc.)

- For health care, CMS is where its at. Move to integrated care, but systems are so different → large challenges for our social services model and Aging Network

Legislative Efforts

- Senate Finance Committee Working Group on Chronic Disease Care Coordination
- Increased awareness of caregiving issues
- Individual Members of Congress releasing specific remedies (housing modification, telehealth, dementia screening)

Caregiver Support Initiatives

## → $470 billion contribution

Caregiver Support

✓ Older Americans Act – Finally passed!

- Lifespan Respite Care Reauthorization Act of 2015 (H.R. 3913)

- Assisting Caregivers Today Caucus (43 Members from the House and Senate)

- Care, Advise, Record, and Enable or C.A.R.E. Act (Currently in 23 states)

Caregiver Support

- The RAISE (Recognize, Assist, Include, Support, and Engage) Family Caregivers Act (Passed the Senate, H.R. 3099)
- Credit for Caring Act (H.R. 4708 and S. 2759)
- See also Sen. Klobuchar's Americans Giving Care to Elders (AGE) Act (S. 879)
- National Care Corps Act of 2015 – H.R. 2668
- Social Security Caregiver Credits (Rep. Lowey's H.R. 3377 and Sen. Murphy's S. 2721)
- FAMILY Act - Paid Family and Medical Leave (S. 786, H.R. 1439)
- Care Planning Legislation
  - HOPE for Alzheimer's Act (S. 857 and H.R. 1559)
  - Care Planning Act of 2015 (S. 1549)

Other Vital Issues

- ✓ Housing Opportunity Through Modernization Act of 2016—Signed into law

- Money Follows the Person Reauthorization

- BIP Reauthorization

- Prevention and Wellness Programs (Prevention and Public Health Fund)

- Veteran Directed HCBS

- ADRCs
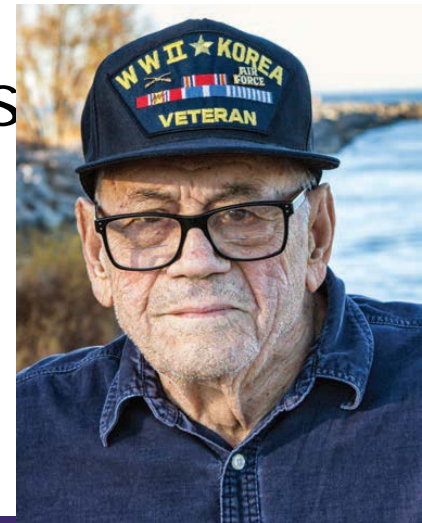
Advocacy Opportunities

- Tell your Members of Congress to **preserve SHIP/SCSEP funding** and **boost funding for Older Americans Act programs**, esp. Title III B Supportive Services!

- Push your state to include the Aging/Disability Network in all new/revised efforts to better coordinate care, rebalance care, or connect community supports to acute health care systems, **especially during MMC implementation!**

- Raise aging issues in all elections. The demographics MUST drive conversation, then change.

Autumn Campbell, Director, Public Policy and Advocacy
acampbell@n4a.org

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Washington, DC 20036
202.872.0888
www.facebook.com/n4aACTION
www.twitter.com/n4aACTION

**Policy and Operations Update
Information and Referral: Aging and
Disabilities Preconference Intensive
2016 HCBS Conference**
Martha Roherty
Executive Director
NASUAD

8/27/2016

www.nasuad.org

CMS Managed Care Regulations

NPRM published on June 1, 2015 (CMS-2390-P)
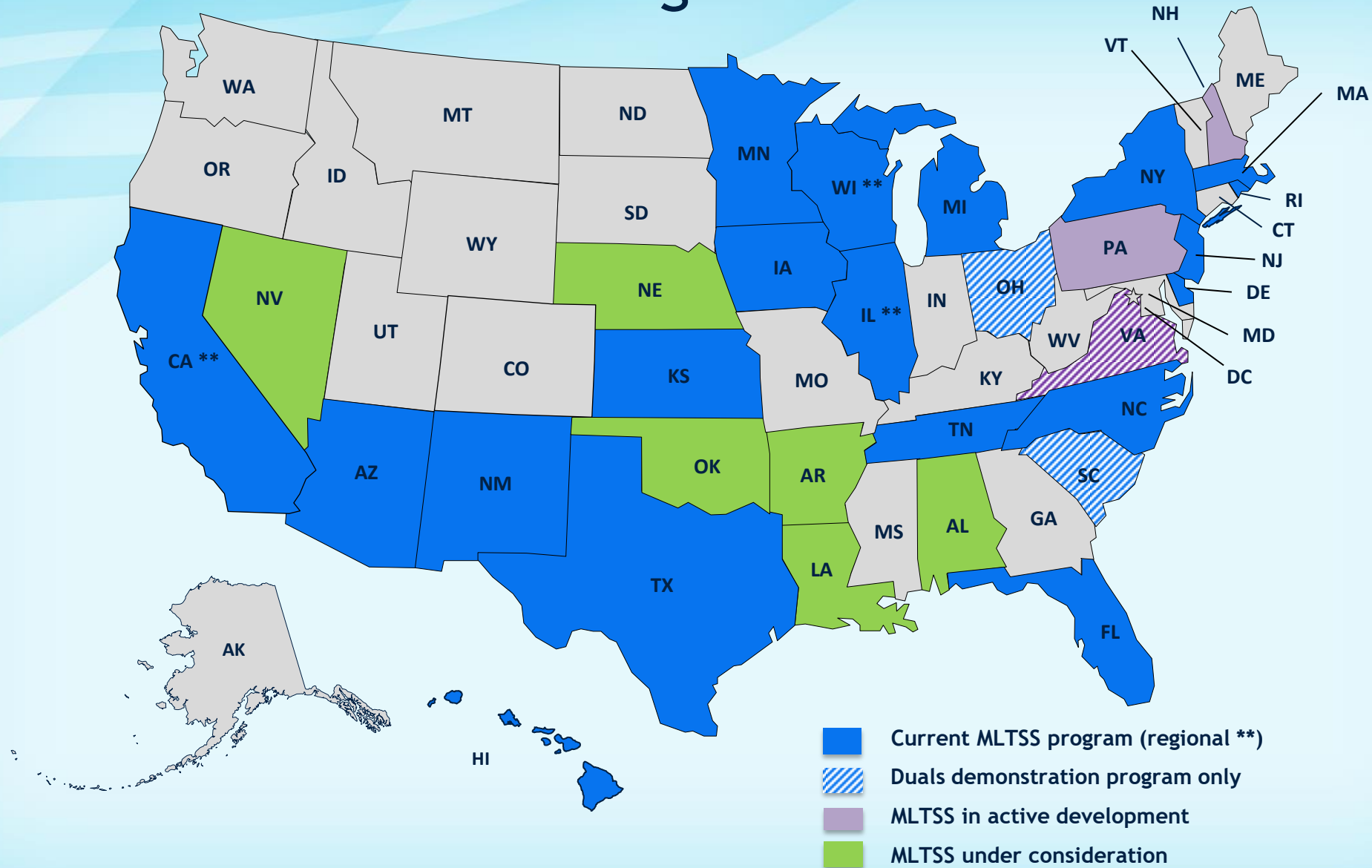
Final Rule published on May 6, 2016 (CMS-2390-F)

https://www.gpo.gov/fdsys/pkg/FR-2016-05-06/pdf/2016-09581.pdf

The Basics

- First update in 14 years
- Guided by 5 principles
  - Support State efforts to advance delivery system reform
  - Strengthen beneficiary protections
  - Strengthen program integrity by improving accountability and transparency
  - Aligns key Medicaid and CHIP managed care requirements with other health coverage programs
  - Modernizes regulatory requirements and improve quality of care

MLTSS Programmatic Requirements

The regulations address these elements

Adequate planning & transition strategies	Support for beneficiaries
Stakeholder engagement	Person-centered processes
Enhanced provision of HCBS	Qualified providers
Alignment of payment structures with MLTSS programmatic goals	Participant protections
Comprehensive & integrated service package	Ensuring Quality

NASUAD

MLTSS Programs - 2016

Legend:
- Current MLTSS program (regional **)
- Duals demonstration program only
- MLTSS in active development
- MLTSS under consideration

Source: NASUAD survey; CMS data

DOL Regulations: Changes to the White Collar Exemption

Managers at many I&R service agencies, HCBS providers, and other aging and disability network members may be affected by this rule

NASUAD

White Collar Exemption

- In 2015 DOL released a proposed rule that would increase the threshold for overtime exemptions to executive, administrative, and professional workers
  - Specific duties test required to determine if employees fit into this threshold
  - Other employees who do not meet this test were already eligible for overtime compensation, regardless of income
- Currently, the threshold is $455/week ($23,660/year)
- The proposed rule set new level at 40th percentile of national wages ($50,440/year) updated annually:
- **The final rule sets at 40th percentile of the lowest wage census block ($47,476/year) and updates every 3 years**
- An **estimated 4.2 million individuals** will be impacted by the changes

NASUAD

White Collar Exemption

- Effective date of the changes: December 1, 2016
  - In the middle of state fiscal years
  - Wide range of state programs, including HCBS, likely to be impacted
- One exemption from the policy:
  - Nonenforcement for community-based providers of ID/DD services with 15 or fewer beds
  - Period of nonenforcement: December 1, 2016 until March 17, 2019
- Policy questions:
  - How to identify "ID/DD services"
  - How to set differentiated rates (if needed) for exempt providers?
- DOL will be issuing subregulatory guidance on these (and many other) issues throughout the fall

NASUAD

CMS HCBS Regulations

Where are we now?

CMS HCBS Regulations

- In January 2014, CMS released regulations that create new requirements for the provision of Medicaid HCBS services
  - The most significant provision is the requirement that all settings of HCBS services be "**integrated into the community**"

- The regulations required states to submit "transition plans" that discuss how they will come into compliance with the rule
  - Transition plans were due March 17, 2015
  - The final compliance date is March 17, 2019

NASUAD

Medicaid HCBS Regulation

- CMS continues to work with states on their HCBS Transition plans
- Only one statewide plan with final approval (TN)
- Four plans with initial approval (DE, IA, KY, OH)
- CMS is focusing on "**systemic**" and "**site-specific**" review of settings
  - **Systemic**: review of state laws, regulations, licensure requirements, etc., for HCBS settings
  - **Site-specific**: process for examining whether the qualities of individual settings comport with the rules
- Ongoing concerns regarding **Adult Day Services** and **Secure Perimeter Settings**
  - CMS/ACL held two conference calls to address these services, but significant questions remain

National Data and Outcomes Study

Background and Methodology

- **Key objectives:**
  – Identify data points
  – Methods of data collection
  – Necessary data systems
  – Current national practices
- **Survey Methodology**
  - Survey drafted by NASUAD staff with input from the Colorado Aging Data Outcomes Advisory Committee (CADOAC) and multiple partners
  - Developed using an online data collection tool
  - Beta-bested with three states
  - Formal administration from June 22nd through July 31st 2016
  - 42 state responses

NASUAD

Finding 1. Most states do not have a common database that includes information from multiple programs

NASUAD

In States with Integrated Databases include the Following Programs
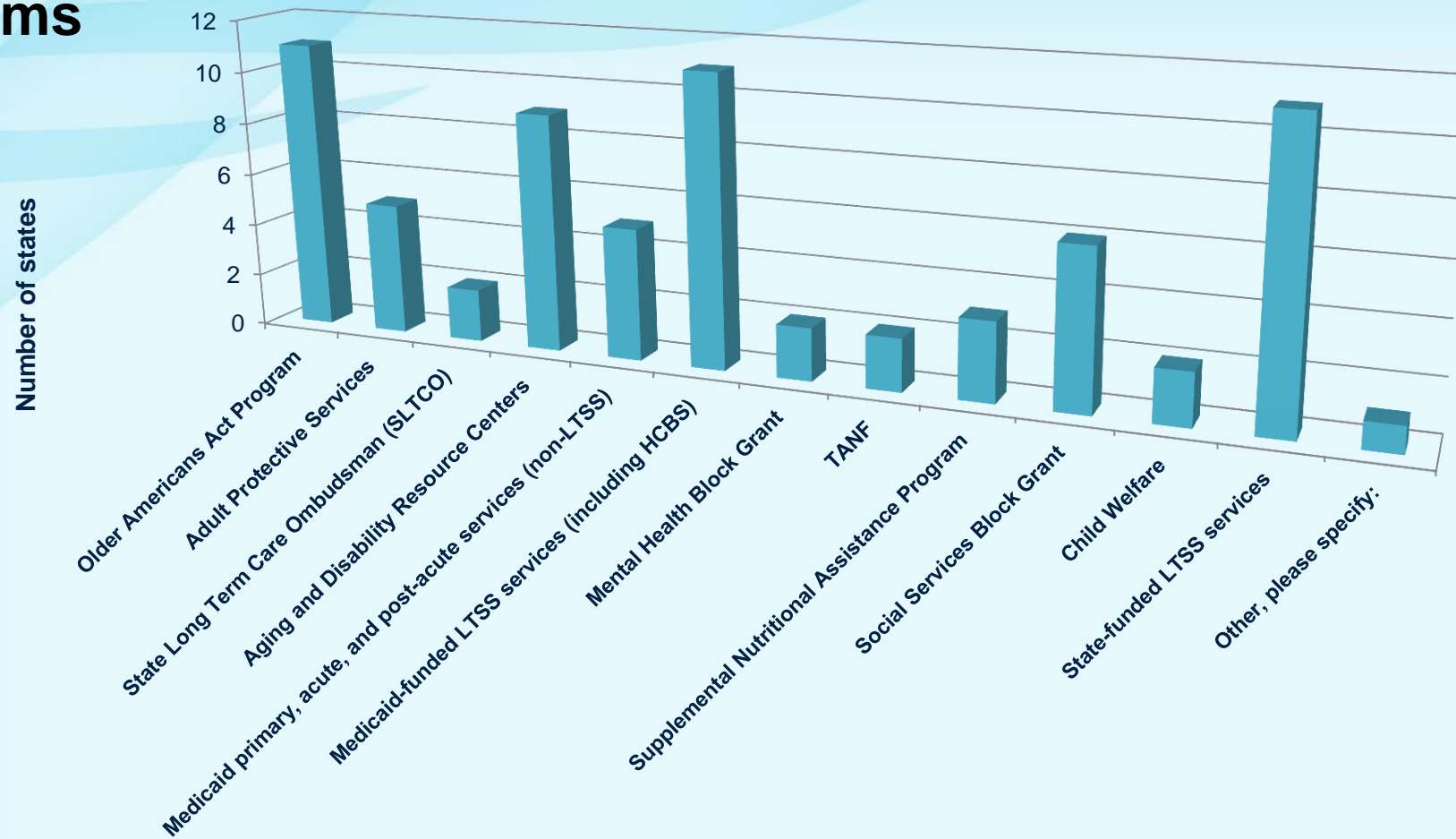
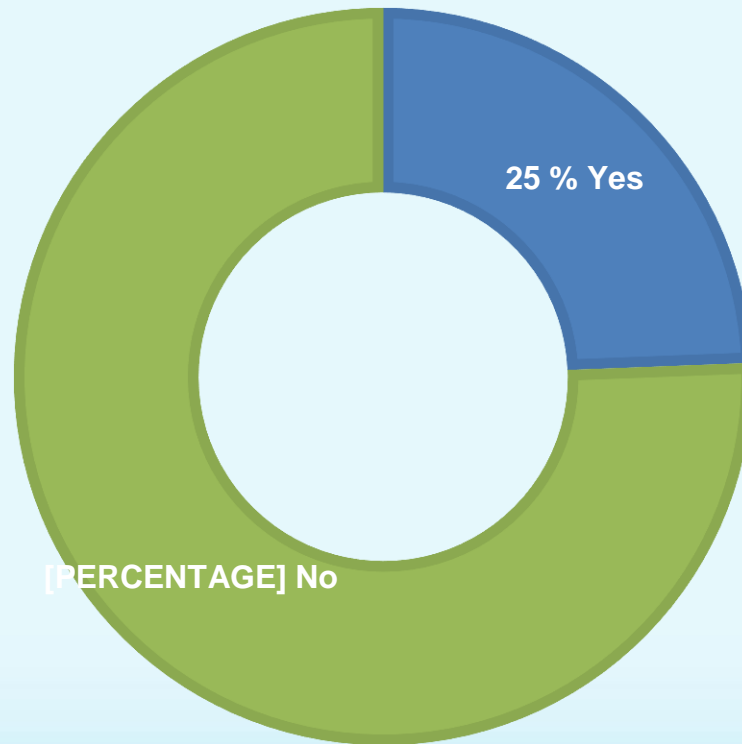# Finding 2: Most States Do Not Share Data with Other State Health and Human Services Programs
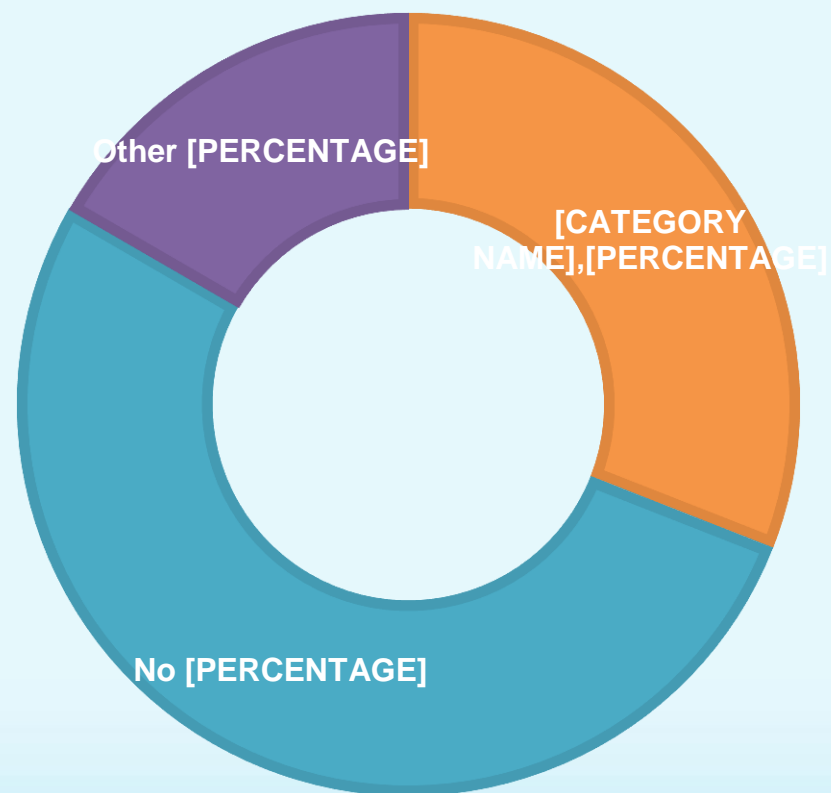
In States that share data, these are the programs that are shared
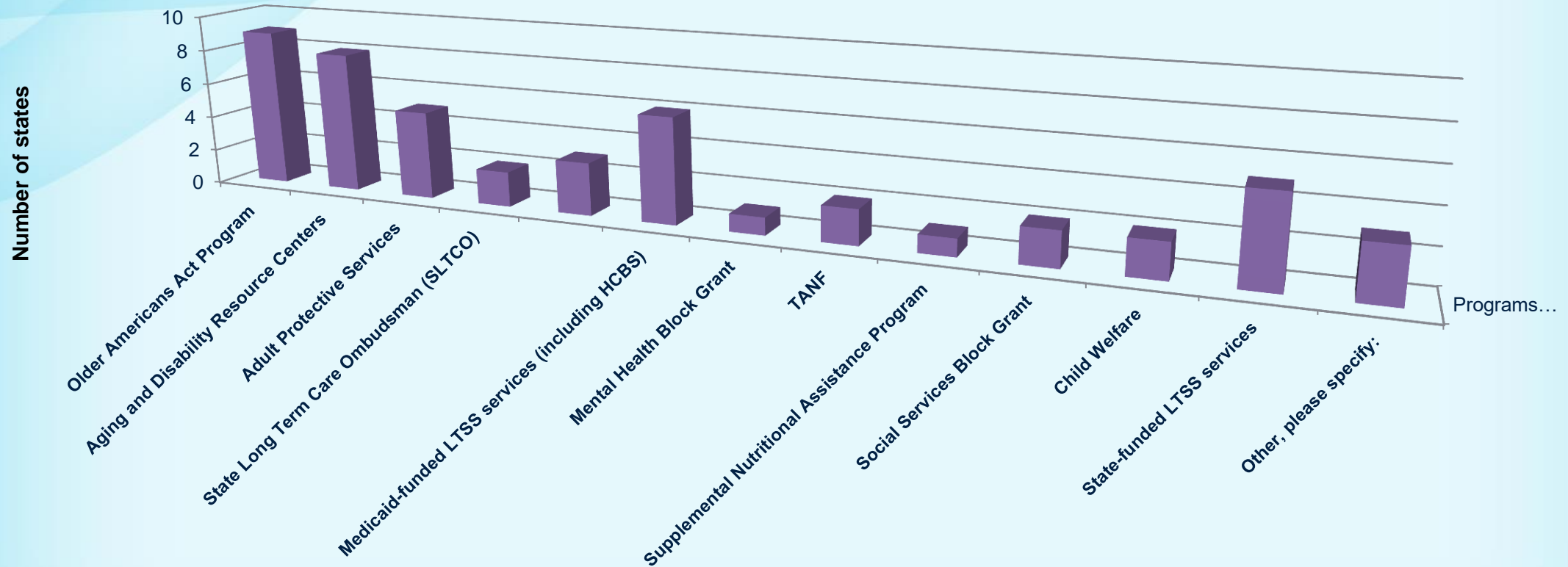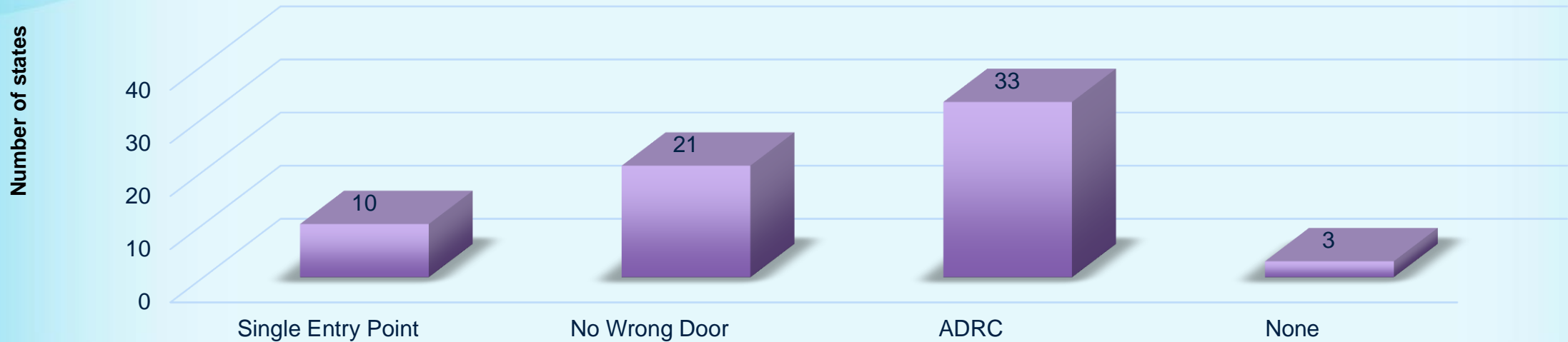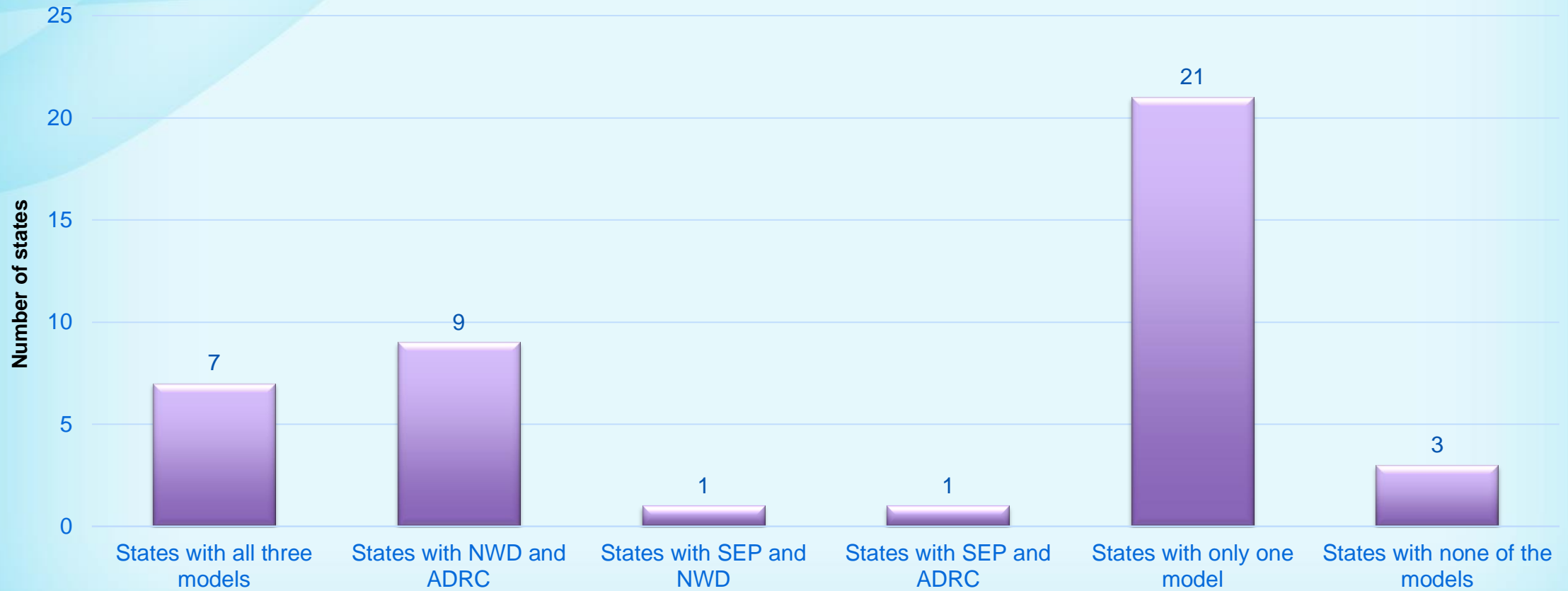
Types of Data Shared
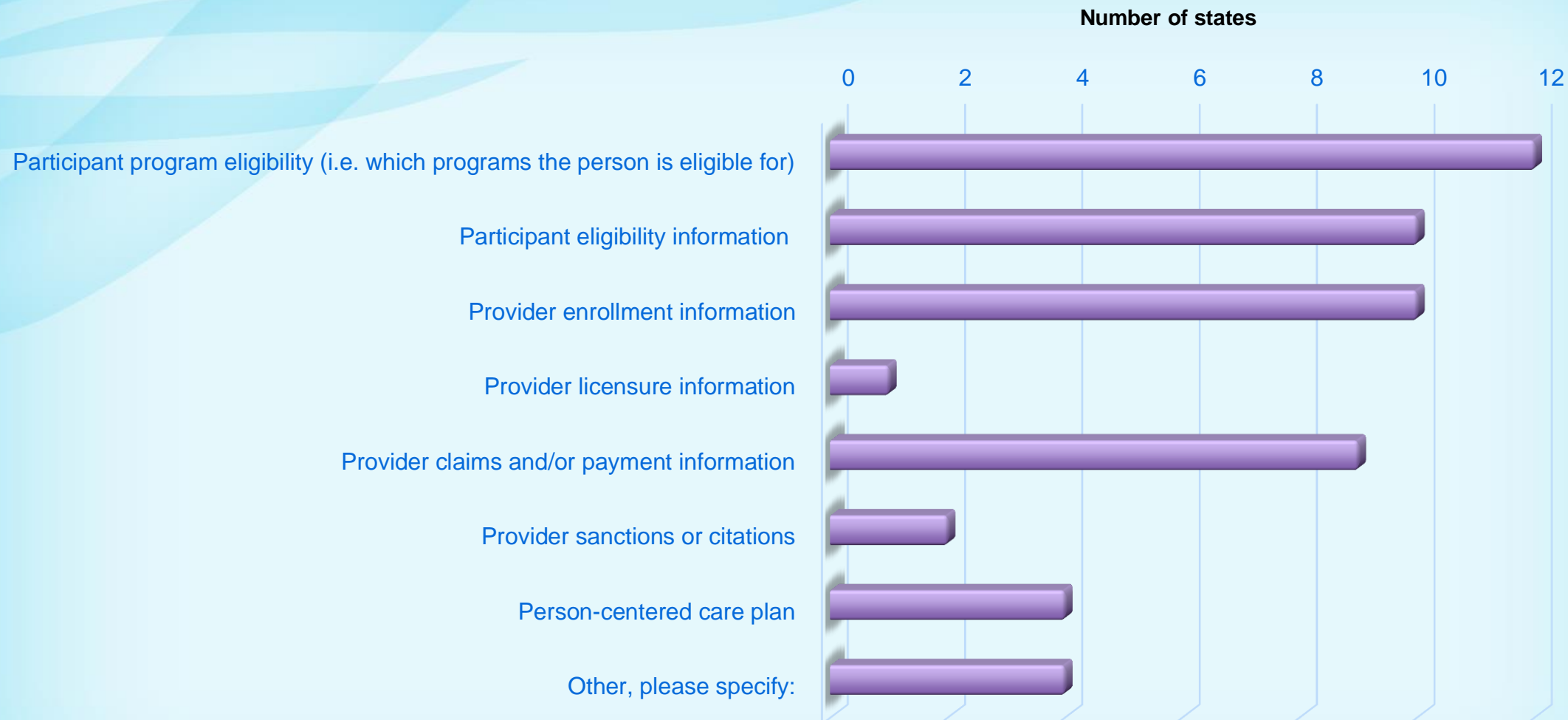
Finding 3: Only 25% of states share HCBS Taxonomy for OAA and Medicaid
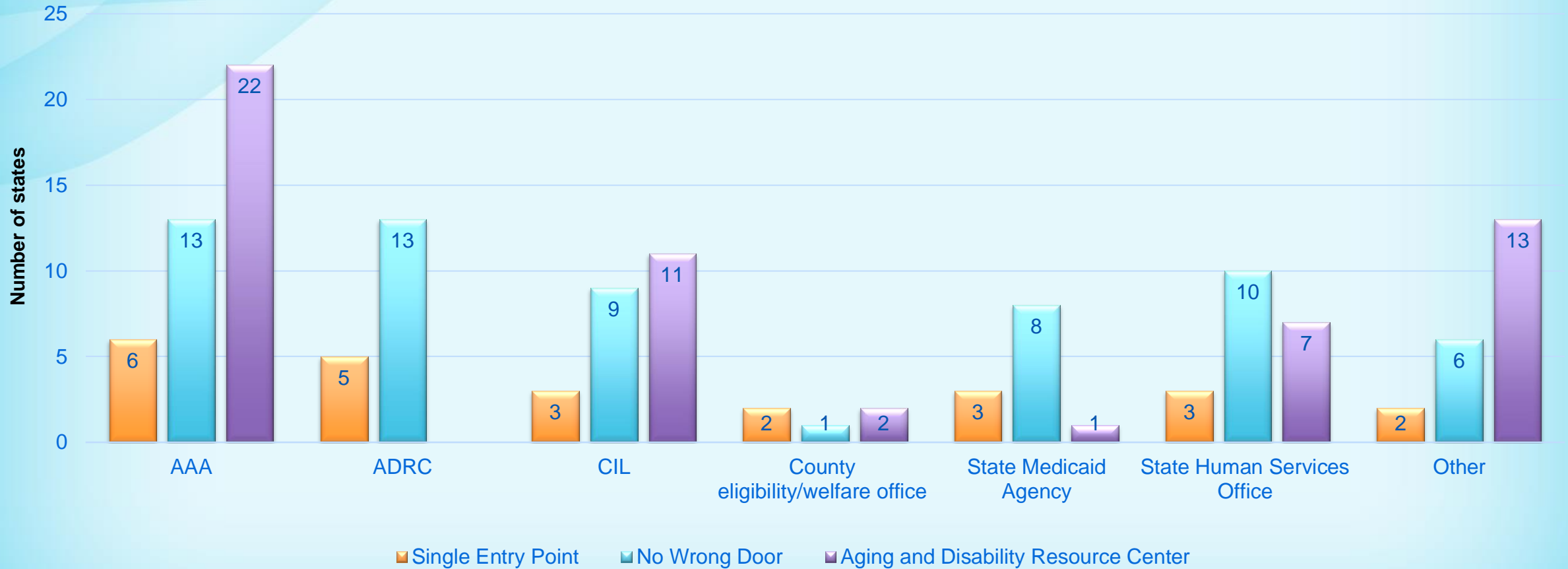

25 % Yes

[PERCENTAGE] No

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Finding 4: Most states have created a place for consumers to find information about multiple programs

Status of Multiple Intake Models

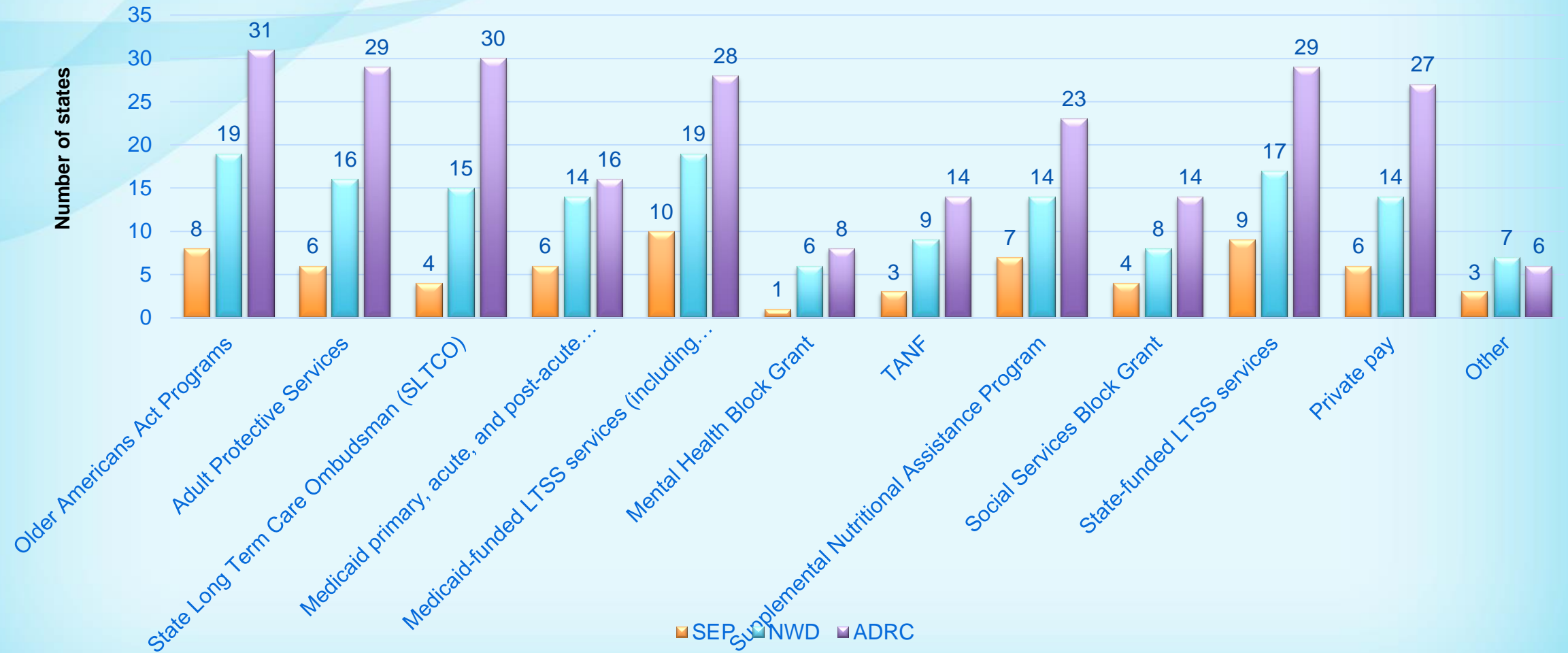Populations Served by SEP, NWD, & ADRC

Page 23
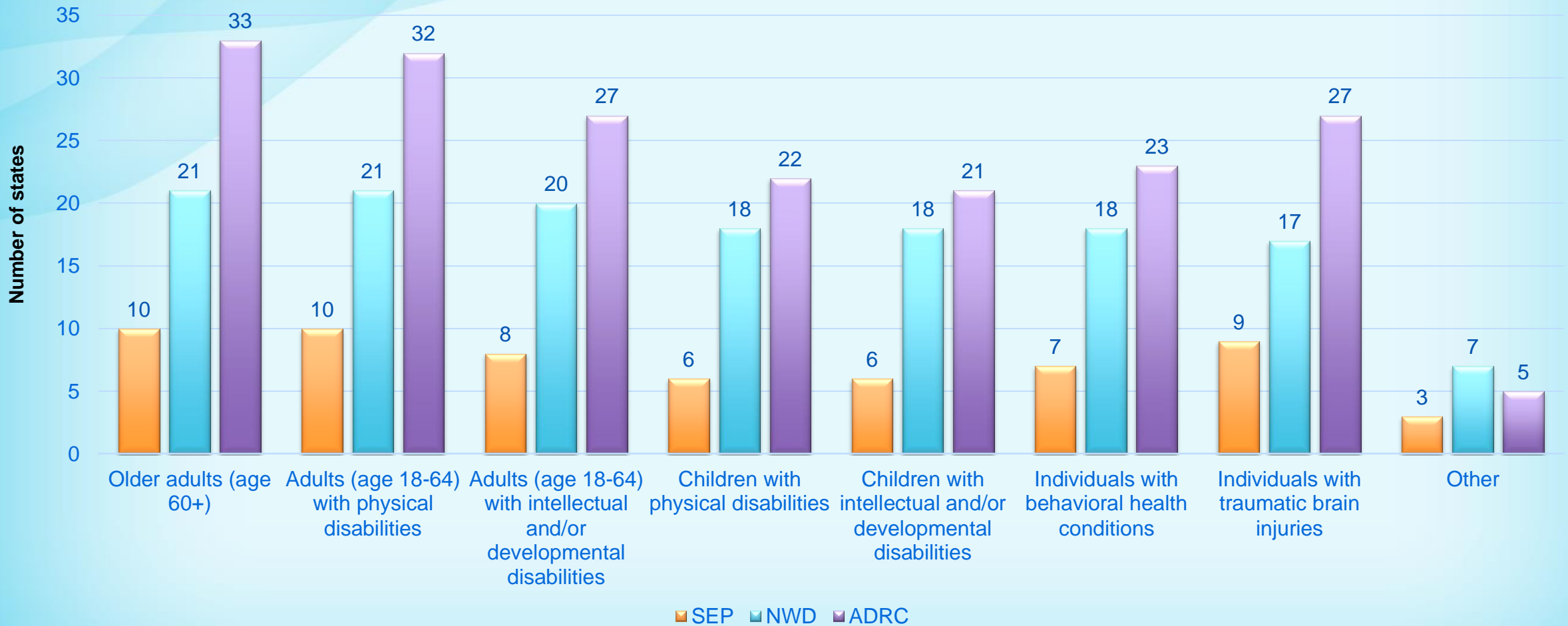
Services accessed by SEP, NWD, & ADRC

Key Takeaways

1. Lack of Integrated Systems in States Limiting States' Ability to Track Outcomes

2. States' Data Collection Efforts are Driven by Grant Programs, Mandates and Funding Sources/Constraints

3. More States, ACL, and CMS are Seeking Performance Data and Outcomes

4. There is a Lack of Investment in Data Collection   Systems

5. There are Pockets of Promising Practices

NASUAD

For more information, please visit: **www.nasuad.org**

Or call us at: **202-898-2578**

THE HOWS MATTER

Exploring Customer Satisfaction and the Maturation of a Statewide Coalition of Aging and Disability Resource Centers

About Us

State level management and research expertise

Welcome!

- Anne Olson, Director, Office for Resource Center Development, Bureau of Aging and Disability Resources, Wisconsin Department of Health Services
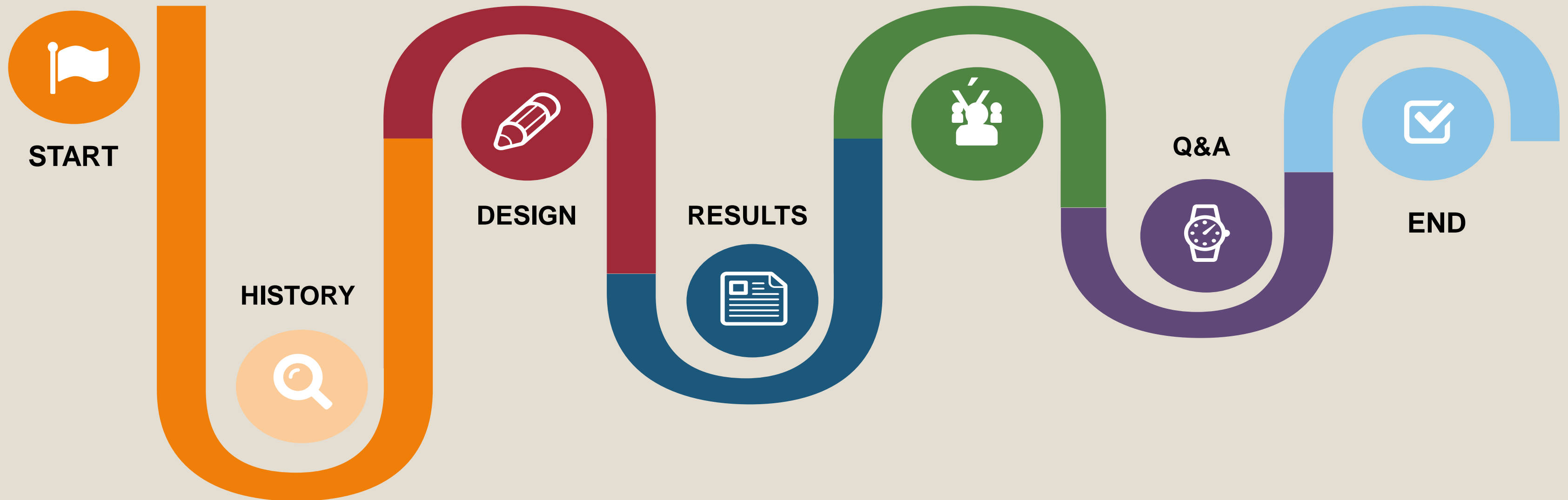
Introduction

- Amy Flowers, President, Analytic Insight

Contracting evaluation and research with the Bureau of ADRCs since 2008

Road Map

State level management and research expertise

APPLICATIONS

START

DESIGN

RESULTS

Q&A

END

HISTORY

About Wisconsin

State level management and research expertise

5,686,986
2010 Population

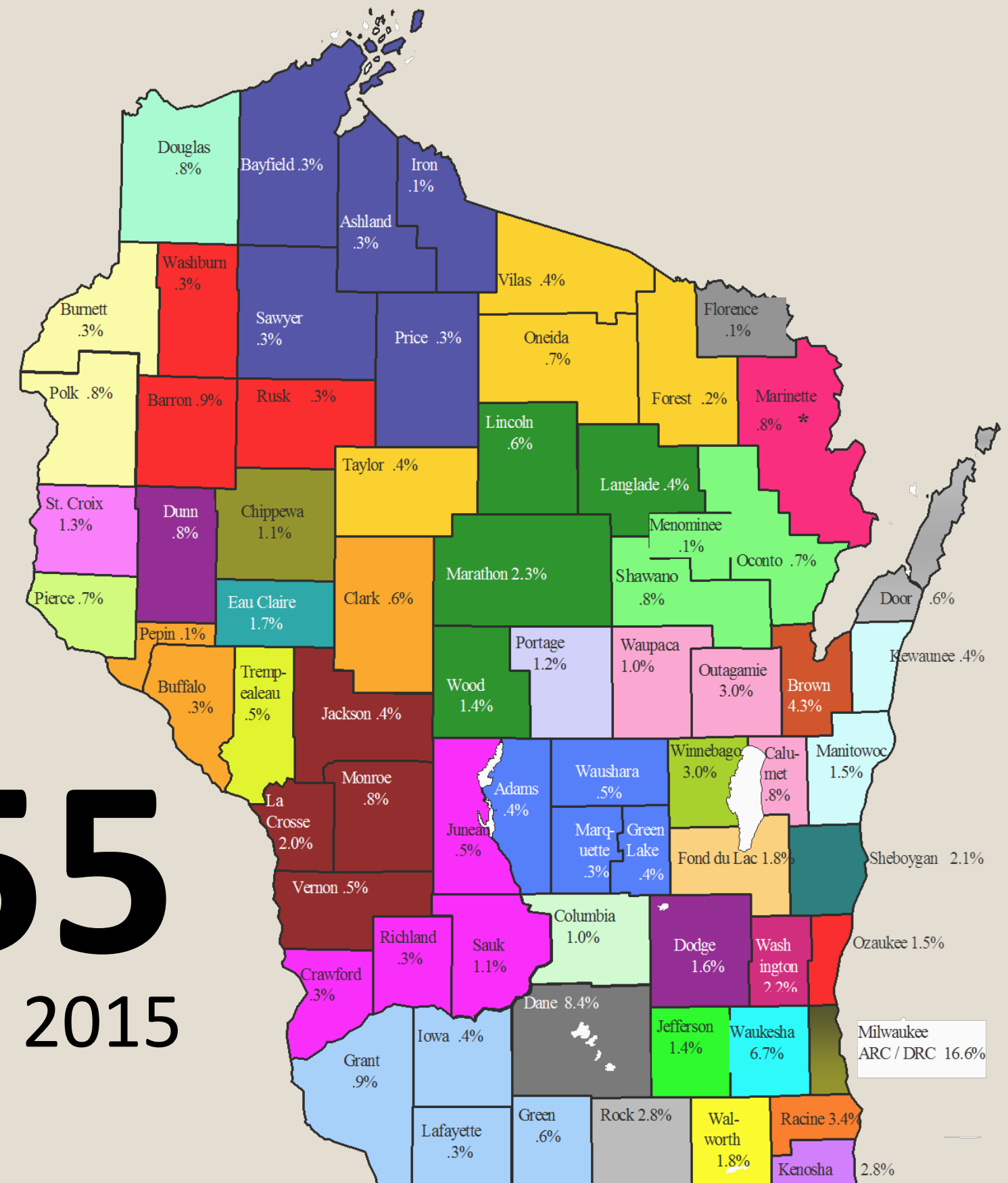**41** Aging & Disability Resource Centers

9 Tribal Aging and Disability Resource Specialists

540,355 contacts in 2015

- ADRC services include individualized counseling on local resources, benefit specialist services, and enrollment into Medicaid long term care programs
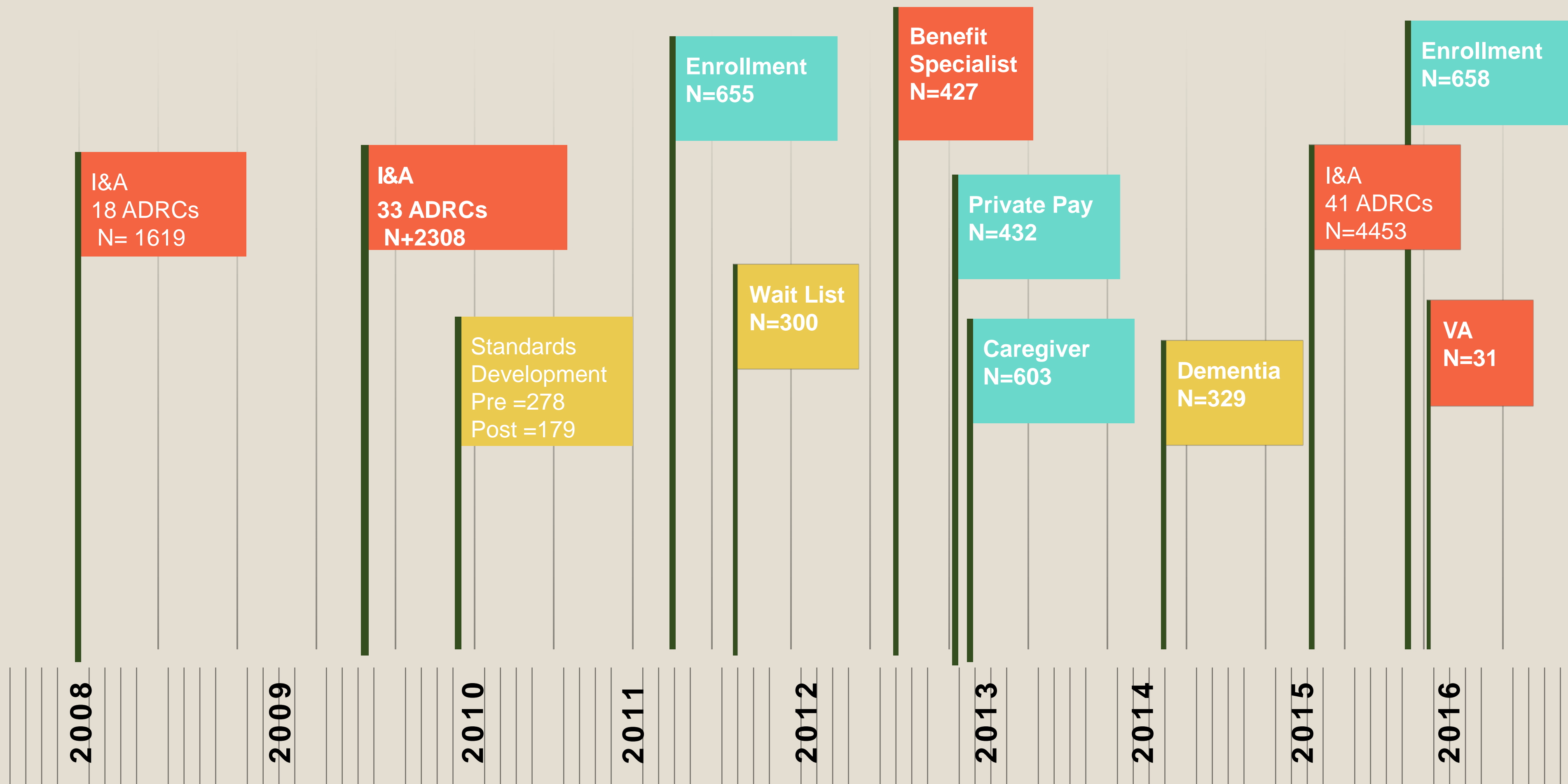- ADRCs and Aging Units are integrated in two thirds of the state.

A few results over time

Overall, how would you rate your experience with the Resource Center?
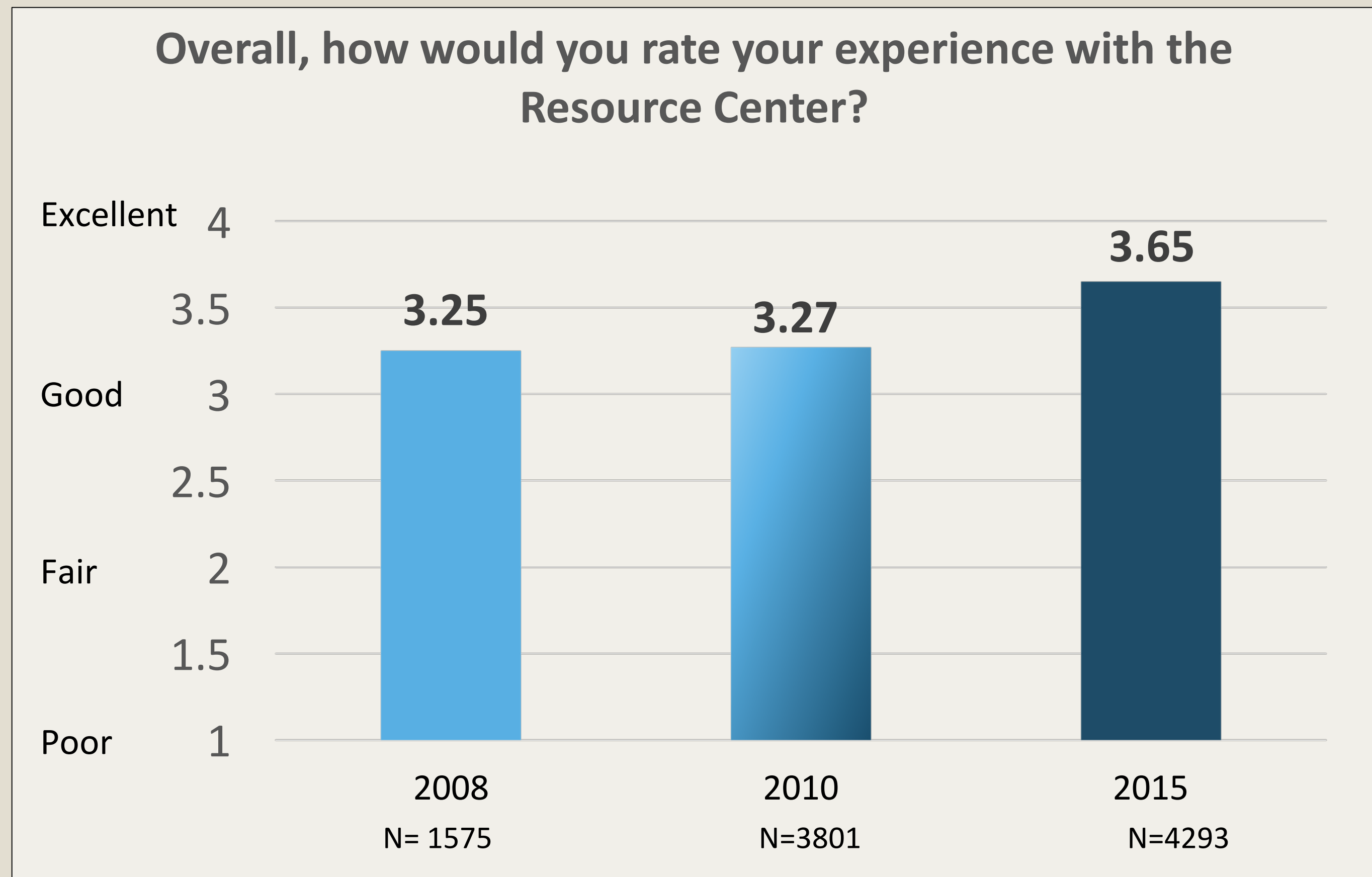
- **No significant difference between 2008 and 2010**
- **Significant increase between 2010 and 2015**

A few results over time

- **"Almost" (.1) significant difference between 2008 and 2010, significant increase between 2010 and 2015**

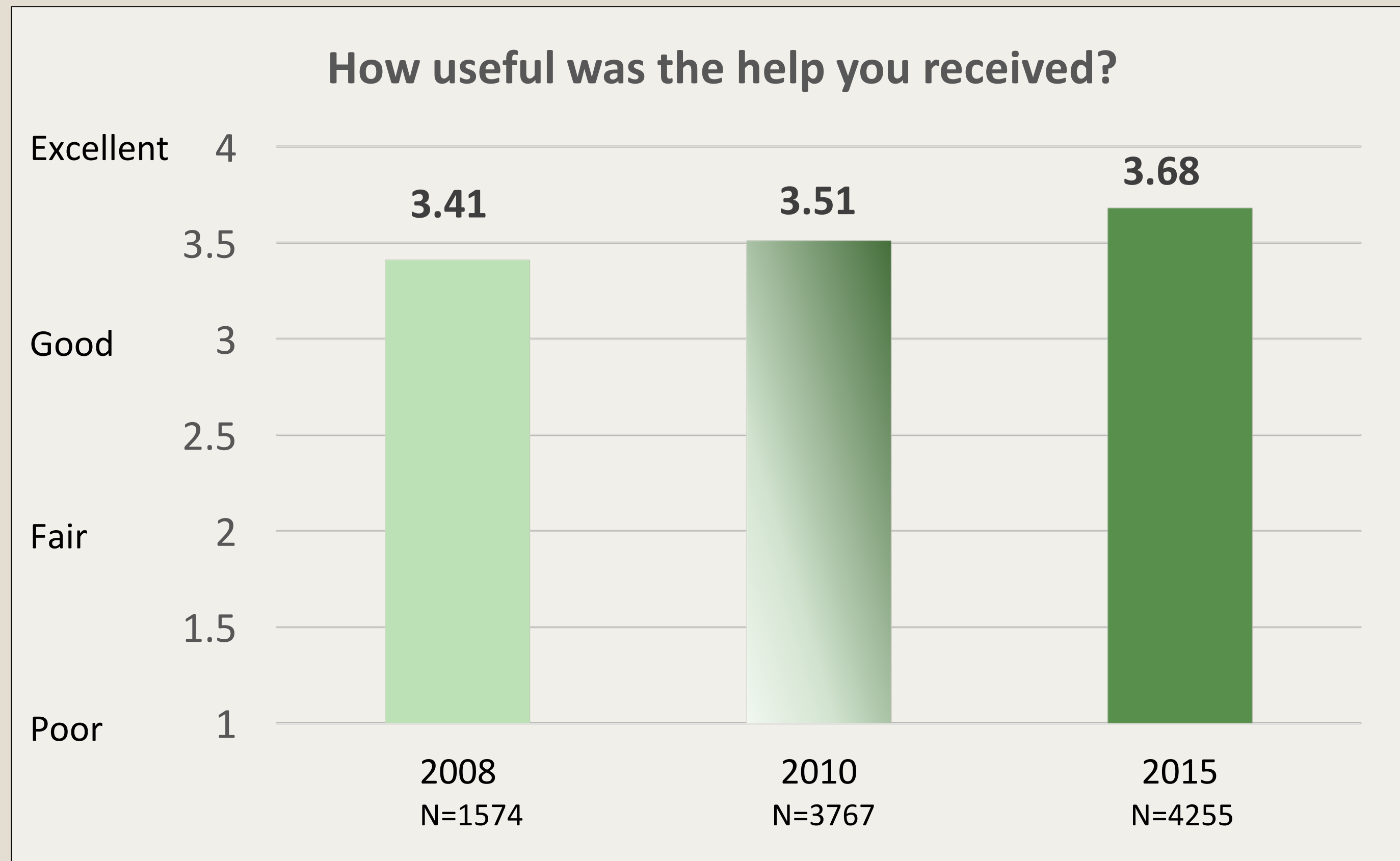# A few results over time

Would you recommend the ADRC?

80.0% (2008, N= 1589)

87.5% (2010, N=3843)

97.0% (2015, N=4350)
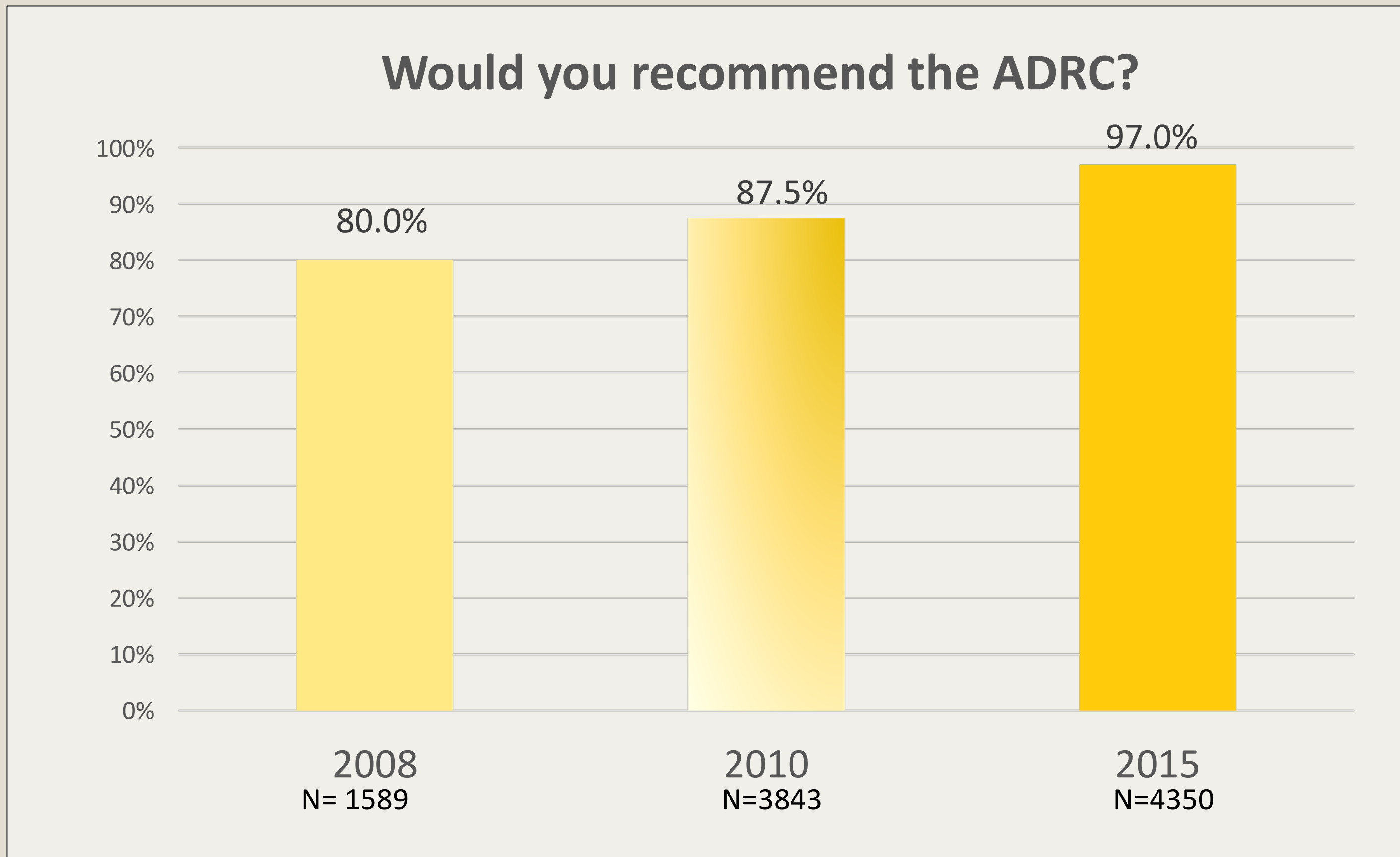
- **Steady, significant increase.**
- **Not much room for improvement.**

What We Learned:
Domains of Customer Satisfaction

Accessibility
- Ability to find the phone number, get to the office and access the ADRC

Culture of Hospitality
- Returning calls promptly, privacy

Knowledge
- Both range and depth on a wide variety of issues

Personalization
- Filtering irrelevant information so as not to overwhelm

Guidance
- Help in applying information to particular situation

Empowerment
- Putting the customer in the driver's seat

- **Comprehensive and distinct measures of customer satisfaction.**

Professional Practice – Getting Ready!

New
Staff

- Recruitment
- Orientation
- Initial learning

- Community
- Peer group

- Expectations
- Coaching
- Documentation

- **Each ADRC receives results specific to its organization.**
- **Department staff review results with each ADRC, discuss possible improvements that directly relate to their customers, and ADRCs implement local change projects.**
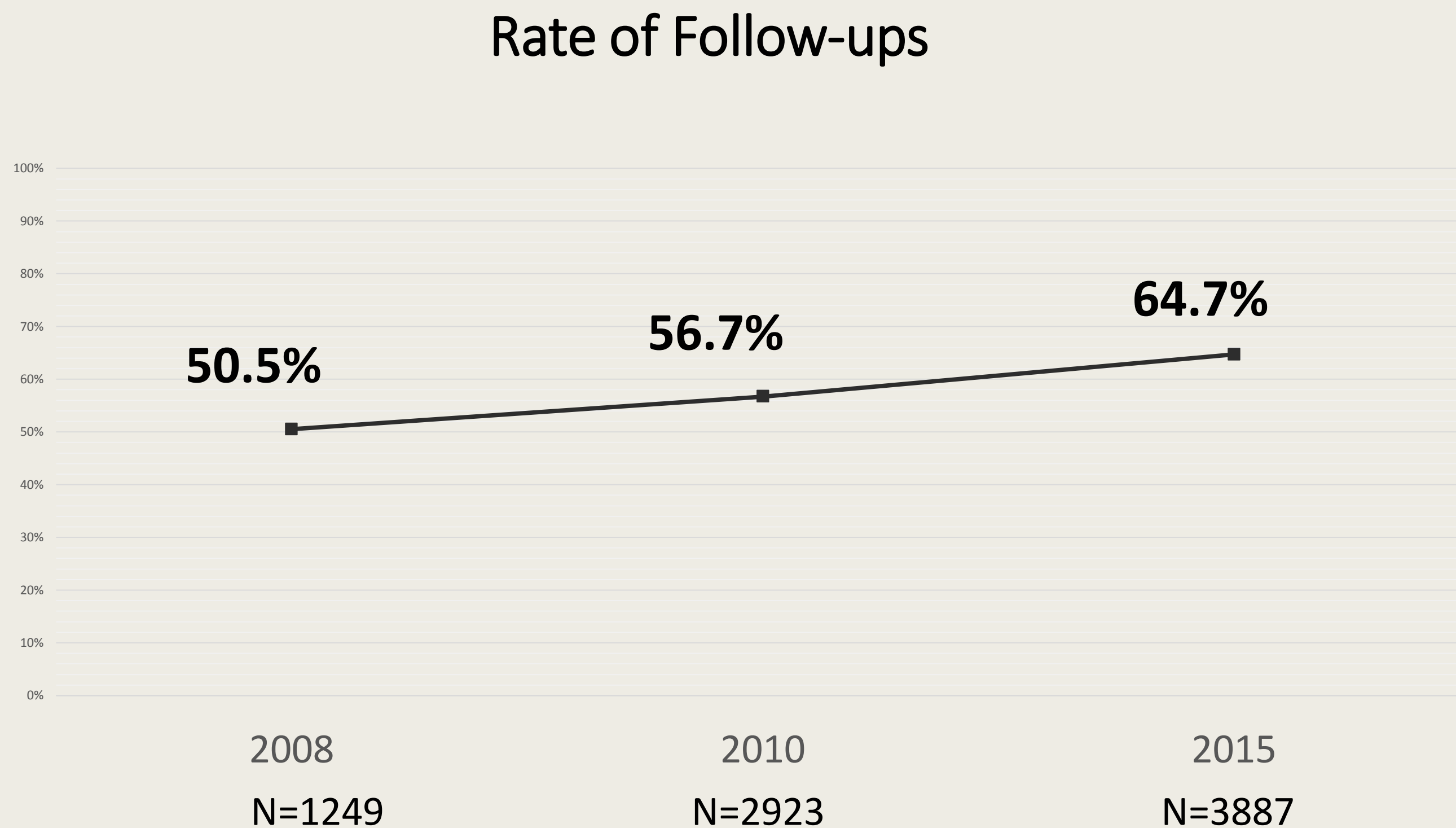
Customers – ADRC Experience

Valued Experience

Accessibility & Culture of Hospitality
- Welcome
- Role
- Confidentiality

Personalization & Knowledge
- Discovery
- Researching options
- Decision support

Guidance & Empowerment
- Next Steps
- Follow-up

- **Survey results have documented specific, 'on the ground,' aspects ADRC service that support individuals in maintaining or restoring their independence in the community.**

Professional Practice – The How

Knowing the population

- Private pay
- Caregivers
- Enrollment
- Veterans

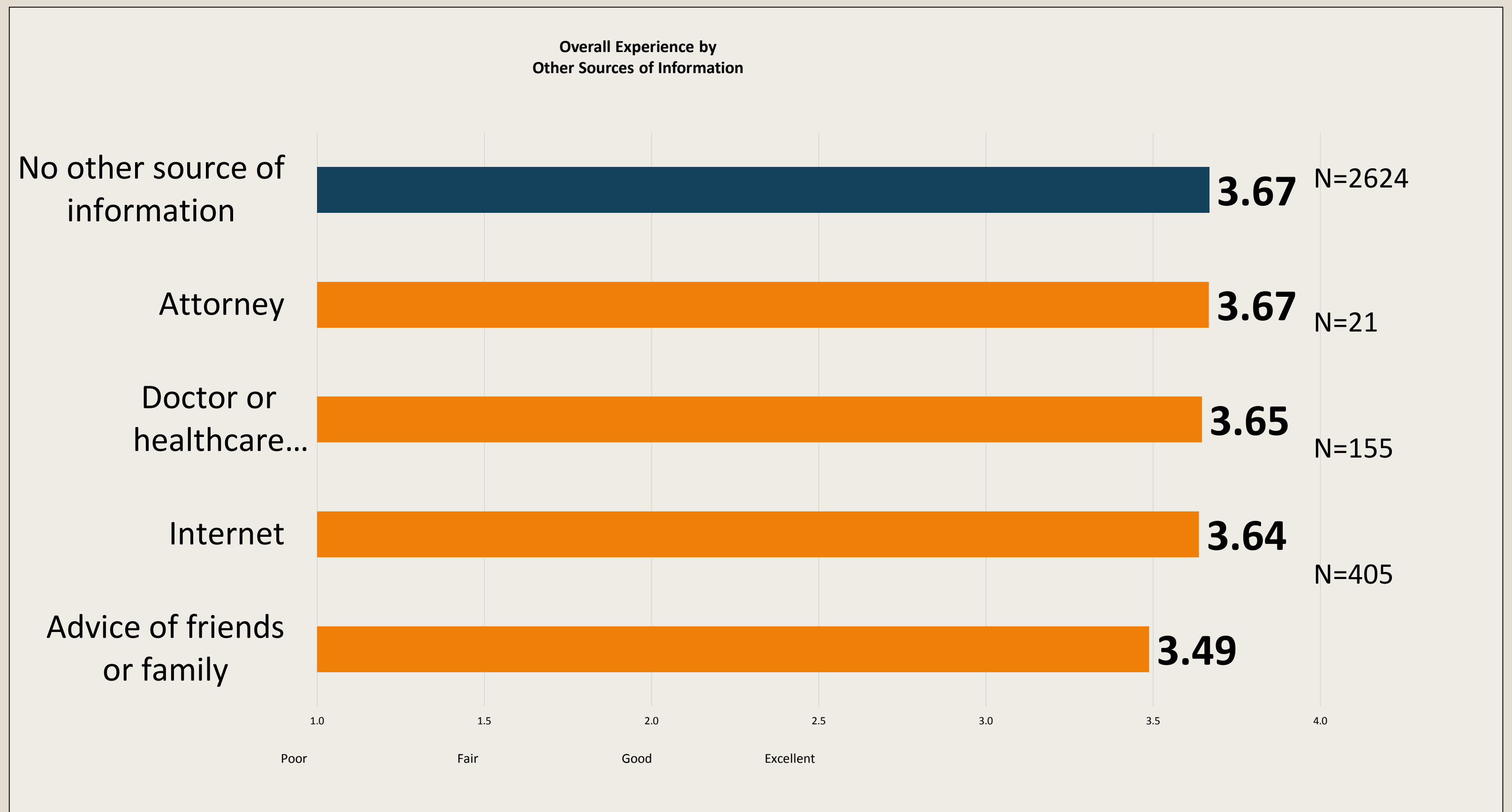## Think strategically for different kinds of conversations

- By topic/need
- By customer type
- By PERSON

Additional Strategy

- Follow up
- Home Visits
- Referrals to Community Resources

- **Research results are very detailed and provide nuanced information about the customer's experience with the ADRC and the effectiveness of ADRC services.**
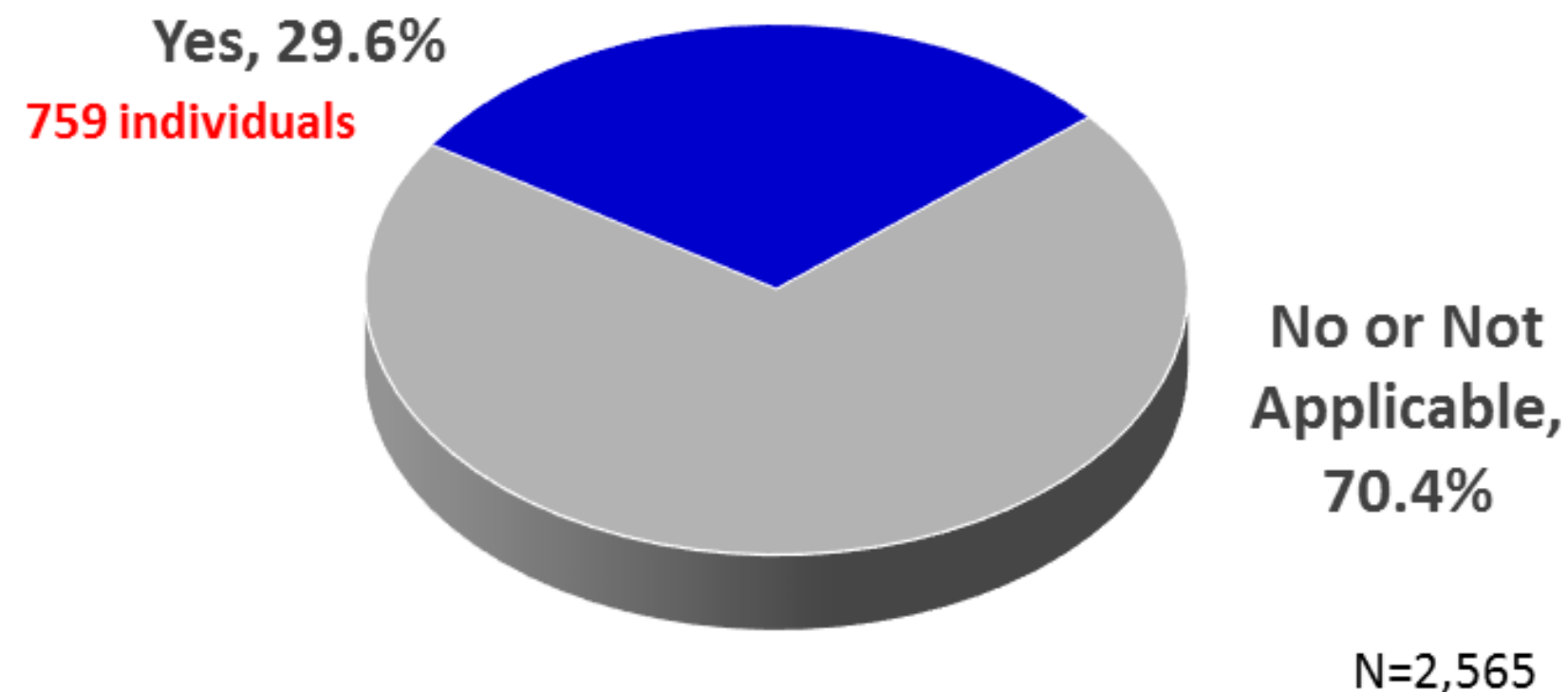
Customer Service for Customers at a Variety of Starting Points

**Overall Experience by
Other Sources of Information**

No other source of information: **3.67** N=2624

Attorney: **3.67** N=21

Doctor or healthcare…: **3.65** N=155

Internet: **3.64** N=405

Advice of friends or family: **3.49**

1.0 1.5 2.0 2.5 3.0 3.5 4.0
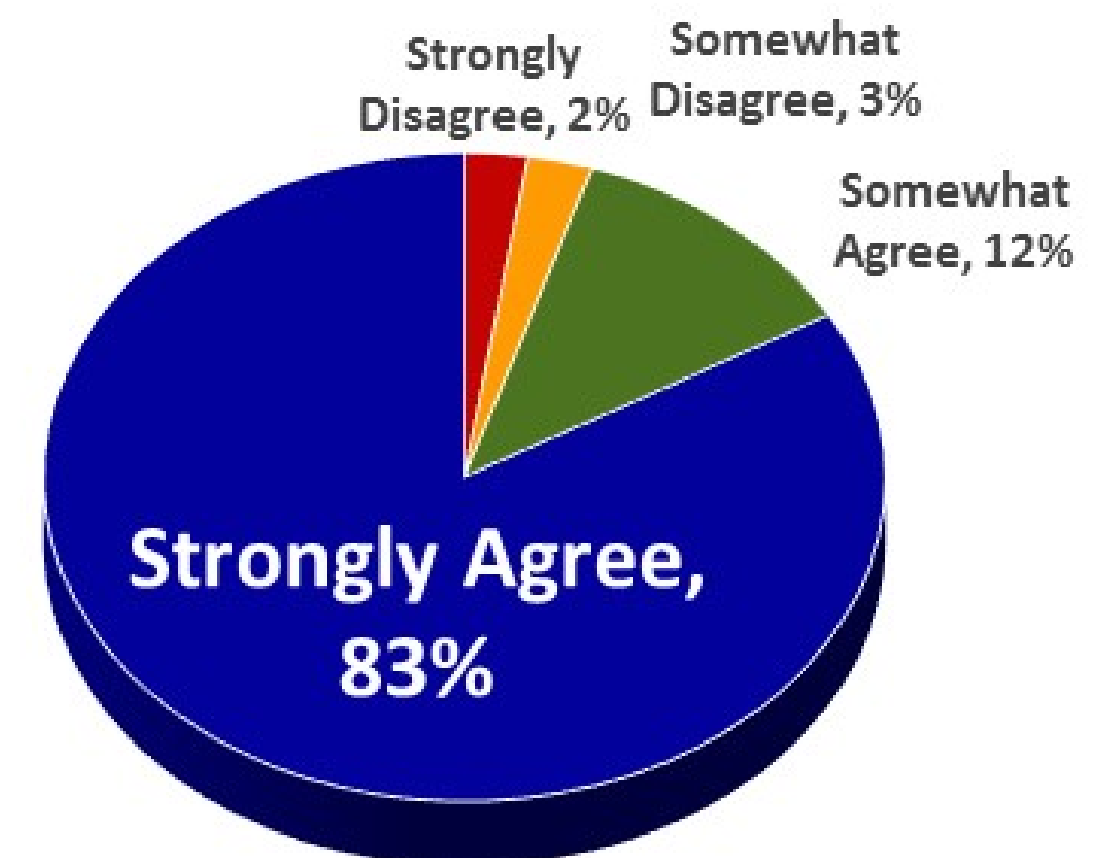
Poor   Fair   Good   Excellent

- **Customers have similar satisfaction levels between self-referral and a referral by another professional.**

Helping Customers Stay in their Homes

The ADRC helped me to stay at home in a situation where I might otherwise have gone to a nursing home or assisted living.

Yes, 29.6%
759 individuals
No or Not Applicable, 70.4%
N=2,565

Helped me use resources wisely

Strongly Disagree, 2%
Somewhat Disagree, 3%
Somewhat Agree, 12%
Strongly Agree, 83%
N=2721

- **Documentation of the positive impact of the ADRC is a valued result of this research.**

Wrap Up

State level management and research expertise

First Step

Knowing what you need to know

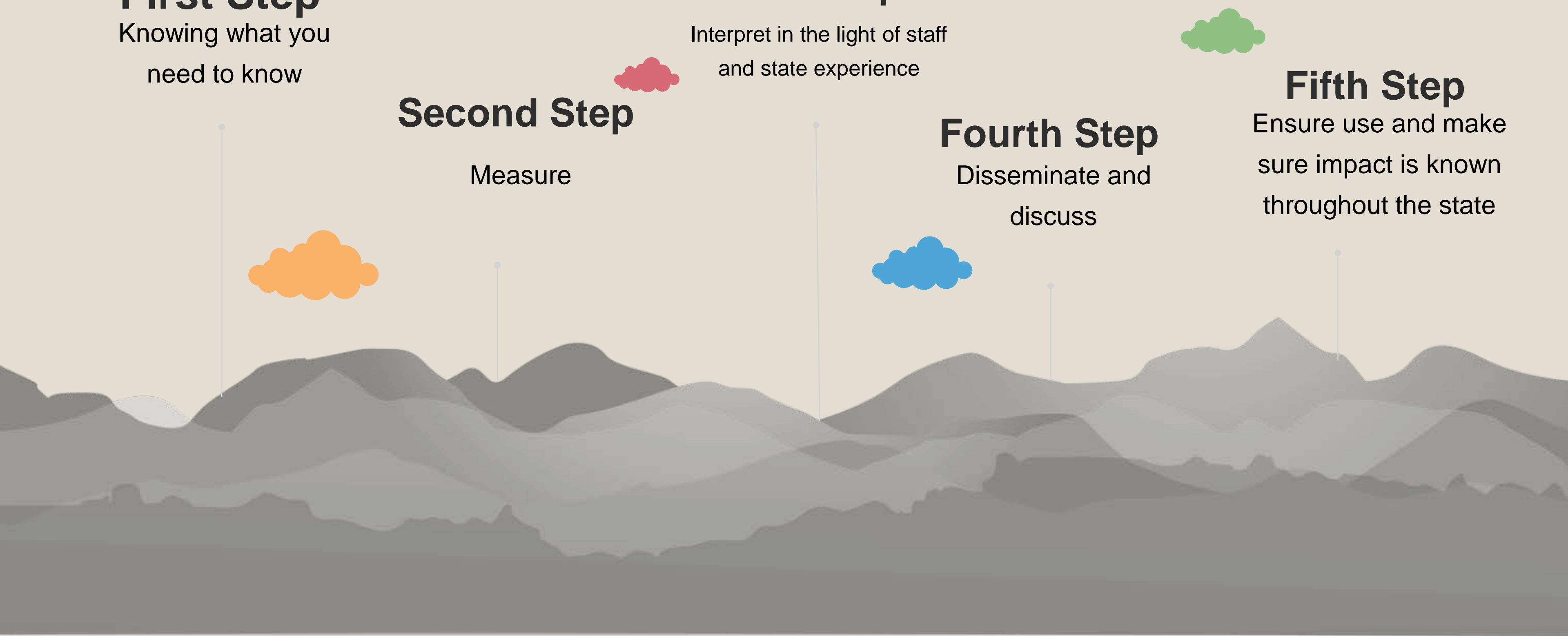**Second Step**

Measure

Third Step

Interpret in the light of staff and state experience

Fourth Step

Disseminate and discuss

Fifth Step

Ensure use and make sure impact is known throughout the state

Resources and Contact Information

Here is a link to the published reports:
https://www.dhs.wisconsin.gov/adrc/pros/index.htm

And this is a link to the coaching tool for options counseling:
https://www.dhs.wisconsin.gov/adrc/pros/opsguide-6-options.htm

Amy Flowers

President
Analytic Insight
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amy@analyticinsight.org
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Anne Olson

Director
Office of Resource Center Development
WI DHS/DPH/BADR
608-266-7872
Anne.Olson@dhs.wisconsin.gov

ADRC/No Wrong Door System Update

Monday, August 29, 2016

2016 HCBS National Conference

Outline

1) What is a No Wrong Door System?

2) What is the role of I&R in a No Wrong Door System?

3) What is the current status of the Person Centered Counseling Training Program?

4) Are there any new funding opportunities for ADRC/No Wrong Door System Functions?

Question # 1

What is a No Wrong Door System?

State's Access System Exists in the Space Between the Public & LTSS - Interface

Public

Long Term Services & Supports

NWD System Organizations

Area Agencies on Aging

Developmental Disability Management Organizations

Centers for Independent Living

Aging & Disability Resource Centers

Local Medicaid Agencies

Behavioral Health Management Organizations

Organizations serving Ethnic & Minority Populations
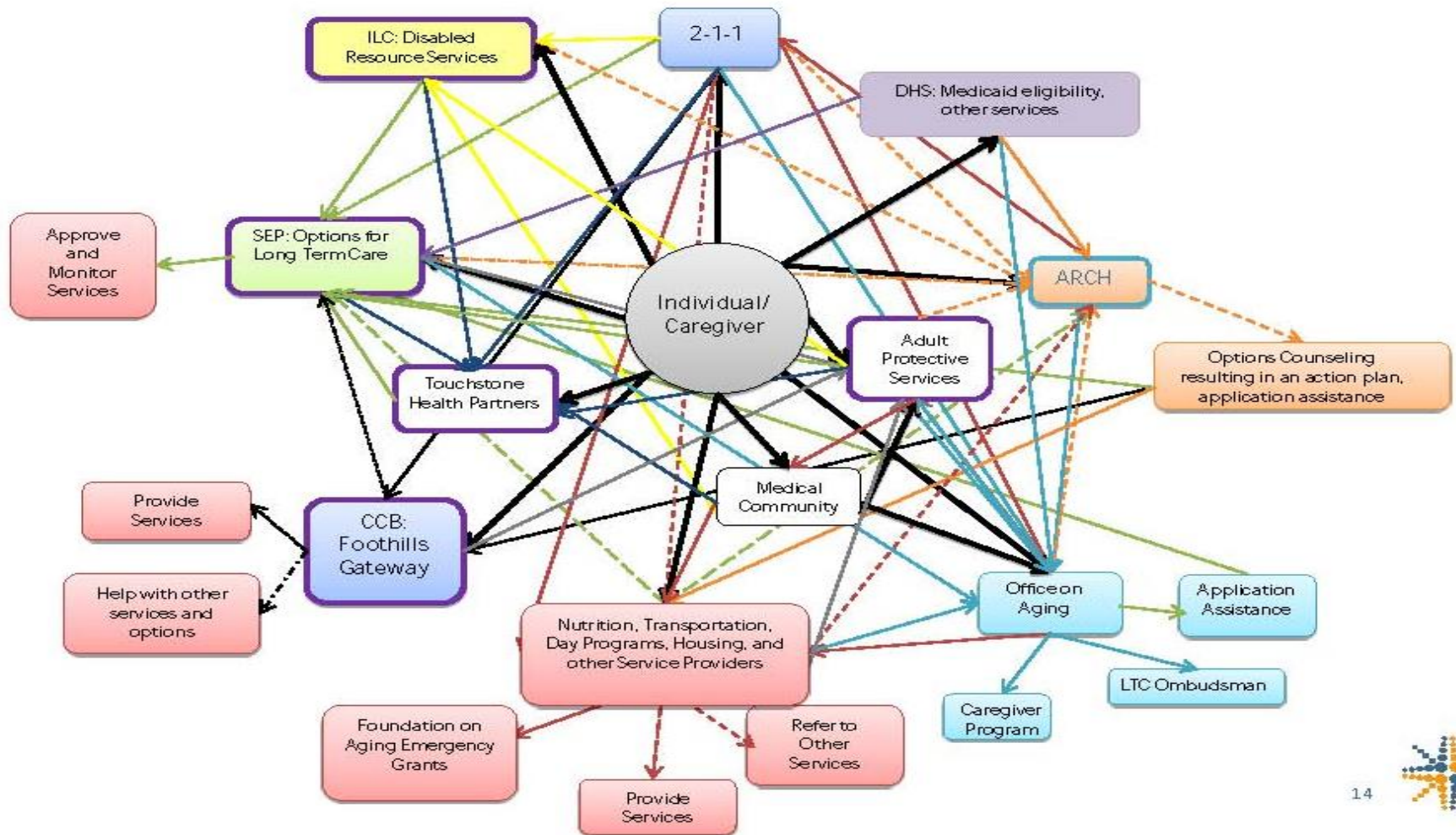
School Districts

Faith Based Organizations

Local Public Housing Agency

Alzheimer's Chapters

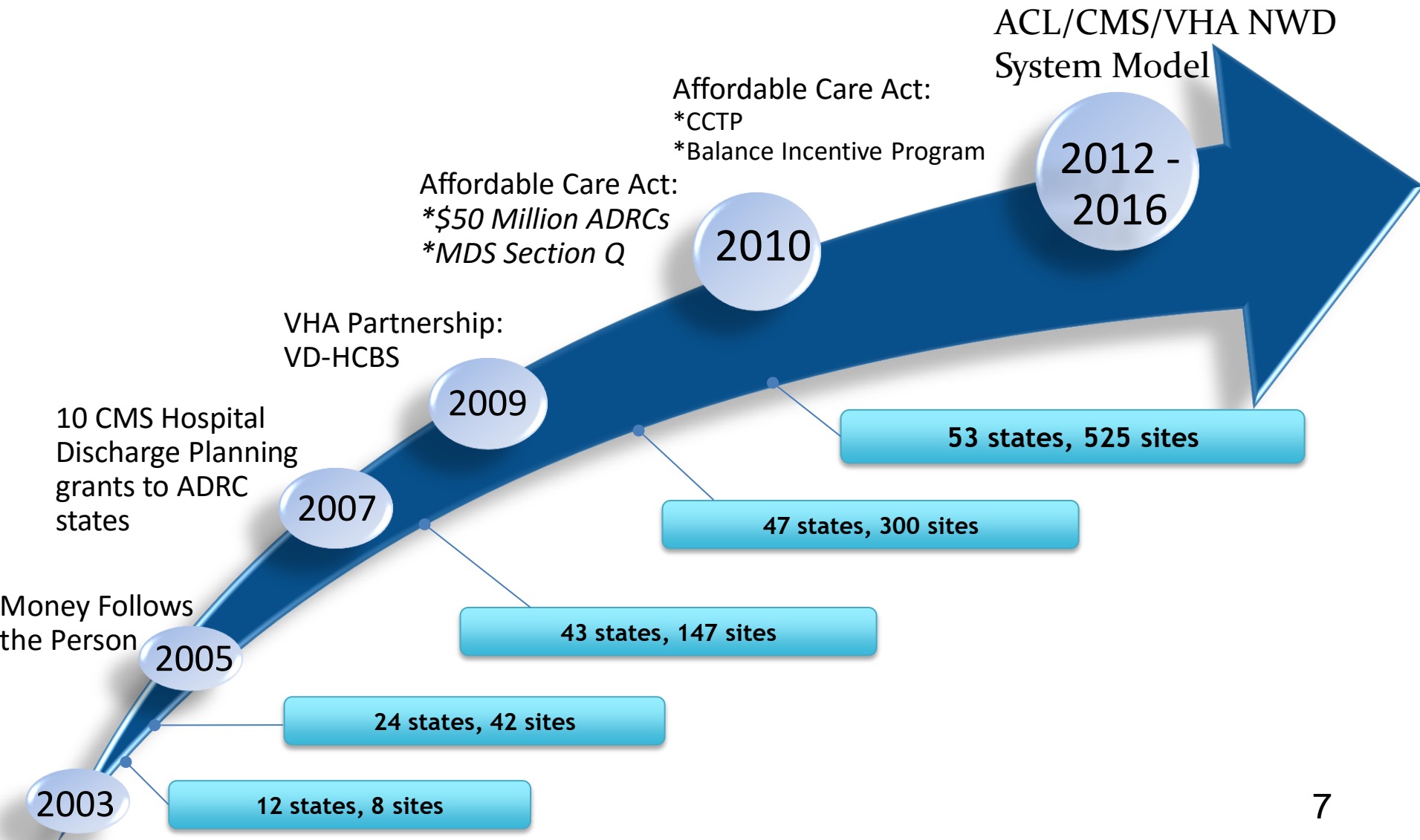Organizations with Peer-to-Peer, including Family to Family models

Other Organizations

The LTSS Puzzle

Evolution of ADRC Development

ACL/CMS/VHA NWD System Model

2012 - 2016

Affordable Care Act:
*CCTP
*Balance Incentive Program

2010

Affordable Care Act:
*$50 Million ADRCs
*MDS Section Q

2009

VHA Partnership: VD-HCBS

10 CMS Hospital Discharge Planning grants to ADRC states

2007

Money Follows the Person

2005

2003

53 states, 525 sites

47 states, 300 sites

43 states, 147 sites

24 states, 42 sites

12 states, 8 sites

7

Key Elements of a NWD System of Access to LTSS for All Populations and Payers

Question # 2

What is the role of I&R in a No Wrong Door System?

The NWD System

Governance and Administration

Coordination with Key Referral Sources
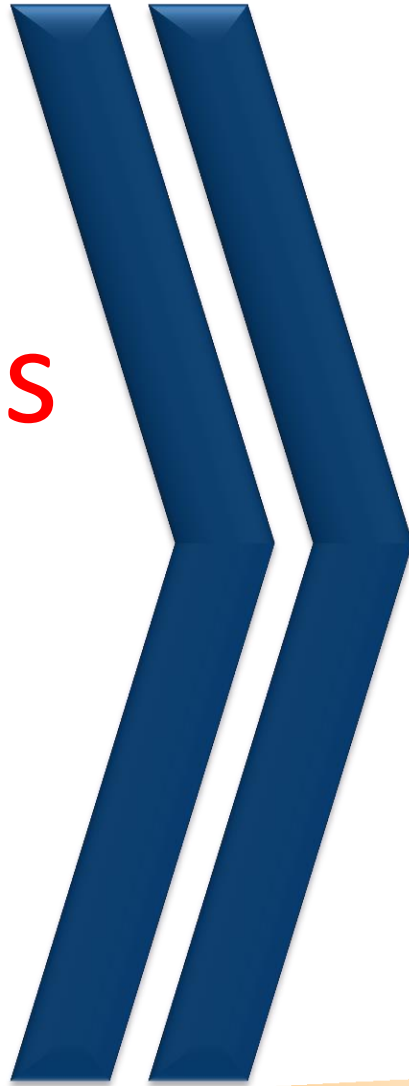
Person Centered Counseling

Streamlined Eligibility to Public Programs
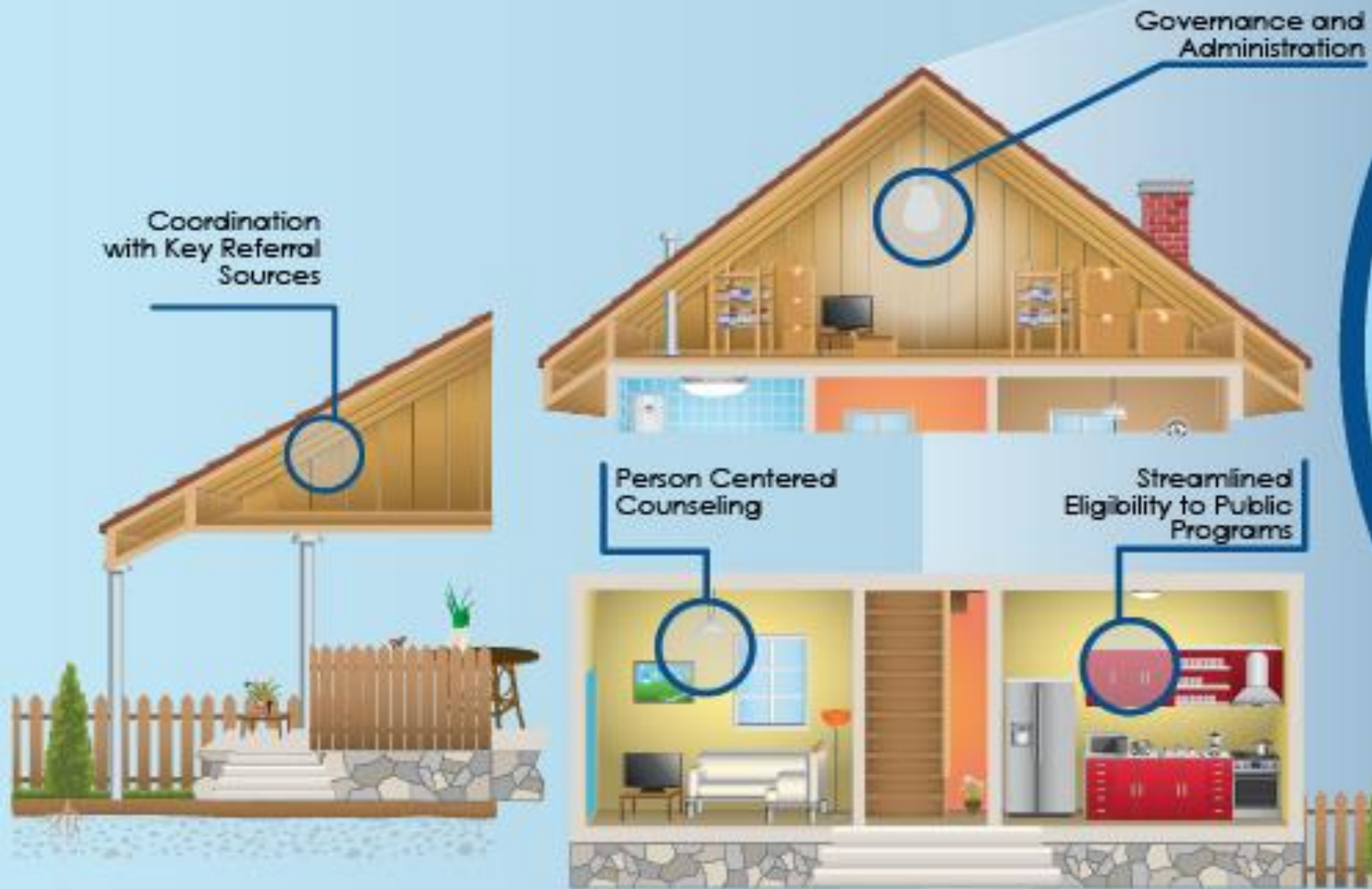
Questions We Answer

➢ Where do I start?

➢ How do I get there?

➢ How do I plan before I go?

➢ How much does it cost?

➢ How do I pay?

➢ How do I customize for my situation?

Skills I&R Specialists Already Have

- Negotiation
- Dispute resolution
- Engagement
- Active Listening
- Strengths based thinking/positive attributes
- Empathy
- Customer service

- Individual and systems advocacy
- Cultural humility, competency
- Openness to learning
- Critical and creative thinking
- Team Building

Putting the Person First

https://youtu.be/y77y7XW8GtE

How Can I&R Specialists Deliver & Implement Person-Centered Thinking, Planning and Practice?

- It requires ongoing goal of understanding and commitment to the person

- Many are already performing person centered thinking, planning, and practice activities, but, like any practice, there is always more to learn, develop, and apply.

- Successful implementation requires system-wide commitment (e.g. just training is not enough).

Question # 3

What is the current status of the Person Centered Counseling Training Program?

Options Counseling vs. Person Centered Counseling

- Options Counseling is a Job Title/Category with practice standards for many people working in a State NWD System.

- Person Centered Counseling is a training program to impart person centered thinking, planning, and practice skills to people working in HCBS systems including Options Counselors and others in the State No Wrong Door System.

# Person Centered Counseling (PCC) Training

- ACL funded the development of PCC Training for front line workers/supervisors in the NWD system

- 6 online courses, 1 full day in person

- Teaches foundational level person centered thinking and planning skills

- 13 states will pilot this year (Approximately 2,300 people)
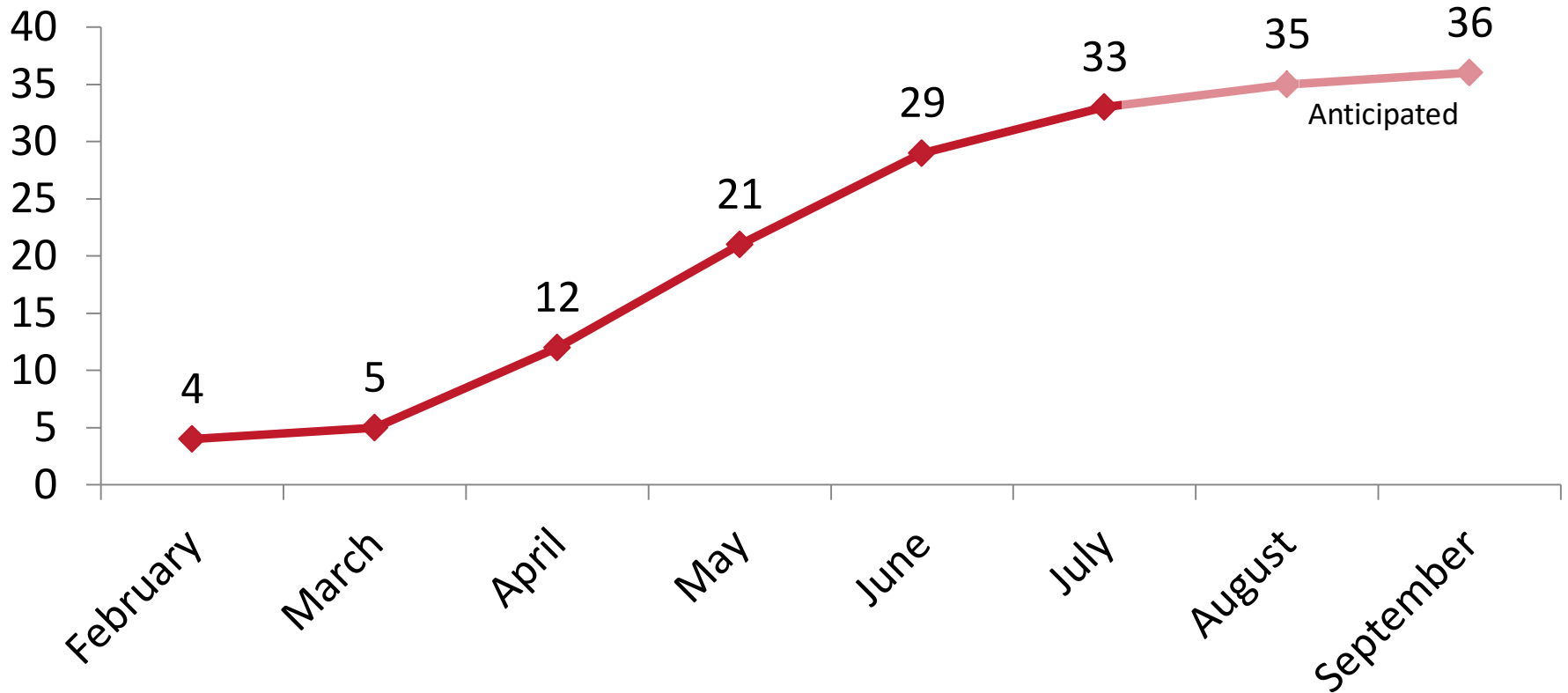
- Website: http://directcourseonline.com/acl/

Active Learners to Date
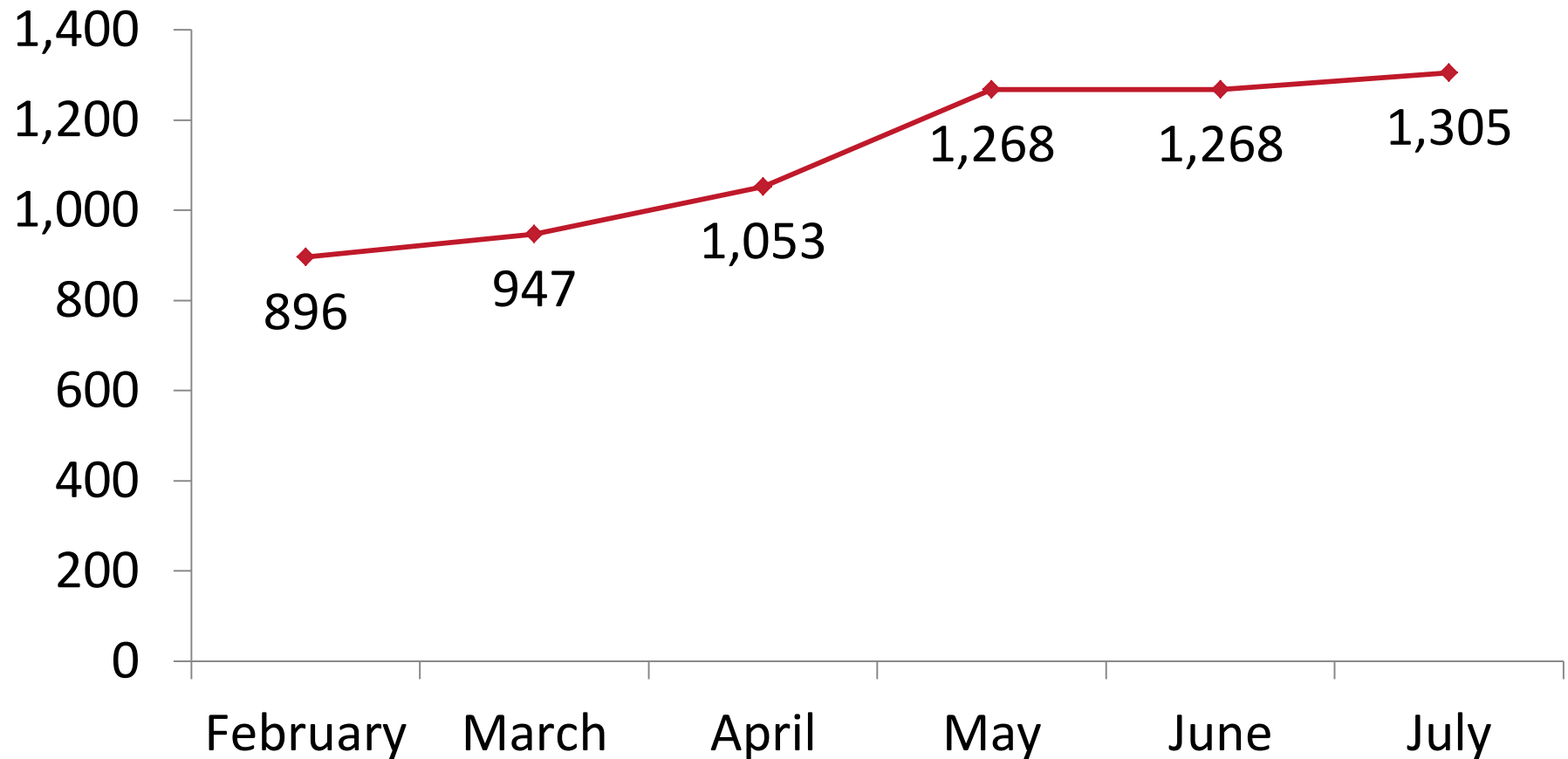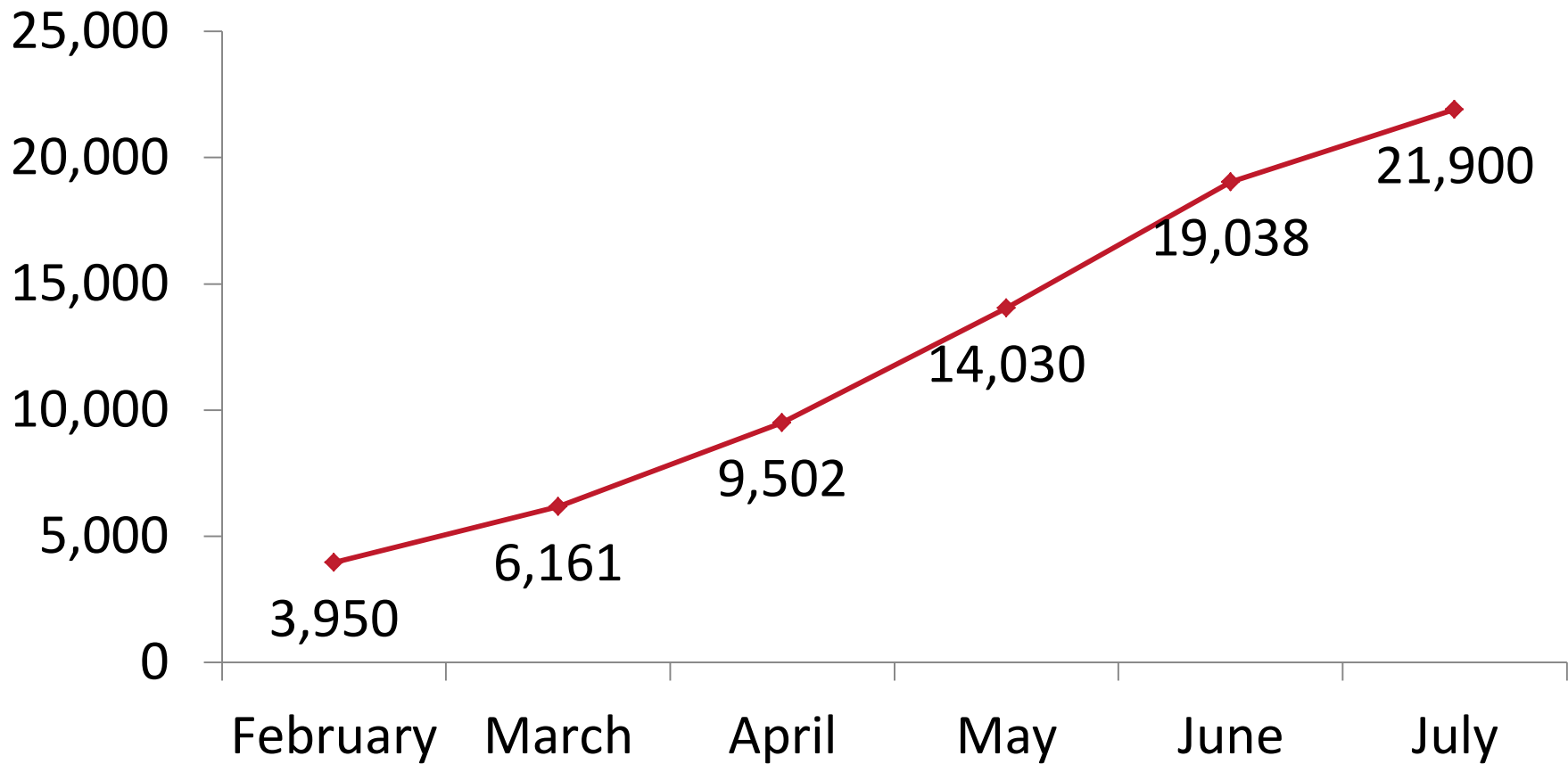
In-Person Training Events Completed

Most trainings are capped at 50 learners.

Key Reference Points

Evaluation Begins *Led by the University of Minnesota, SDA and Lewin Group*	▪ **Monday, October 3**
Continuing Education Units (CEUs) for Online Courses	▪ **TOTAL: 3.0 CEUs – IACET Approved**
Public Release of Content Upon Completion of Evaluation	▪ **Released in the format of a Section 508-compliant PDF** ▪ **Will include text and narration, but no interactive features** ▪ **Toolkit to assist state leads**

Questions?

Email us at
NoWrongDoor@acl.hhs.gov

Free Trial

http://directcourseonline.com/contact/sales-support/

Question # 4

Are there any new funding opportunities for ADRC/No Wrong Door System Functions?

A State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers

➢ **List of 26 Indicators Across 5 Domains in a State Scorecard on LTSS**

   1) Affordability and Access
   2) **Choice of Setting and Provider**
   3) **Quality of Life and Quality of Care**
   4) **Support for Family Caregivers**
   5) **Effective Transitions**

No Wrong Door System
Seeking Sustainable Funding Streams

- **January 2016 CMS posted NWD System standards on CMS website** (link on CMS website)

  - https://www.medicaid.gov/medicaid-chip-program-information/by-topics/financing-and-reimbursement/no-wrong-door.html

- No Wrong Door System and Medicaid Administrative Claiming Reimbursement Guidance

- No Wrong Door System Key Elements

Purpose of the NWD System Reference Document for Medicaid Administrative Claiming Guidance

The purpose of this document is to inform states about the appropriate methods for claiming federal matching funds, known as Federal Financial Participation (FFP), for Medicaid administrative activities performed through NWD Systems, and to ensure non-duplication for any such claims.

What is Federal Financial Participation (FFP)

- FFP provides matching dollars (generally 50%) to cover activities that contribute to the efficient and effective administration of the Medicaid program

- Many ADRC/NWD functions are potentially eligible for matching Medicaid administrative funds

- FFP can provide an ongoing, sustainable source of funding for enhanced activities

- Note: It is likely other agencies in your state already claim administrative FFP and they may be able to provide technical support

Wisconsin - $70M Budget for ADRC and Related Activities

Medicaid Administrative Dollars, $28M

Other Funds, $42M

FY16 4th Quarter Claim

Time Study Code	Statewide Total
1a. OUTREACH: Medicaid	1.41%
1b. OUTREACH: Not Medicaid Related	4.39%
1c. OUTREACH: Not Tied to a Specific Program	2.90%
2a. FACILITATING APPLICATIONS: Medicaid	4.42%
2b. FACILITATING APPLICATIONS Not Medicaid Related	5.66%
3a. REFERRAL/MONITORING OF SERVICES: Medicaid eligible	8.38%
3b. REFERRAL/MONITORING OF SERVICES: Spend Down	1.41%
3c. REFERRAL/MONITORING OF SERVICES: Not Medicaid Related	12.49%
4a. TRAINING AND PROGRAM PLANNING: Related to Medicaid or a	5.41%
4b. TRAINING AND PROGRAM PLANNING: Related to a Program or	8.60%
4c. TRAINING AND PROGRAM PLANNING: Not Tied to a Specific	7.46%
5a. OPTIONS COUNSELING: Medicaid or Potentially Medicaid	2.19%
5b. OPTIONS COUNSELING Follow-Up for Medicaid or potentially	0.21%
5c. OPTIONS COUNSELING: Medicaid Ruled Out as an Option	0.71%
5d. OPTIONS COUNSELING: Follow-Up for Medicaid Ruled Out as an	0.04%
6. LEVEL I SCREEN	4.35%
7a. ACTIVITIES REIMBURSED BY ANOTHER SOURCE	0.71%
7b. ACTIVITIES REIMBURSED BY ANOTHER SOURCE:Not Reimbursed	0.42%
8. GENERAL ADMINISTRATION	21.79%
9. OTHER	7.04%
	Statewide Total
Total Activities Related to Medicaid (1a, 2a, 3a, 3b, 4a, 5a, 5b, 6)	27.78%
Total Activities Not Related to Medicaid (1b, 2b, 3c, 4b, 5c, 5d, 7a)	32.60%
General Administration (1c, 4c, 7b, 8,9)	39.61%
Total Medicaid Claimable	46.01%

- 3000 samples generated
- 150 staff total
- Only 3 samples missing at end of quarter!
- Statewide Medicaid Claimable % = **46.01%**
- First FFP Claim = $667,532

Obtaining and Implementing Medicaid Administrative Federal Financial Participation for ADRCs in Hawaii and Maryland

September 1, 2016
11:30 am - 12:45 pm

Questions?

Email us at
NoWrongDoor@acl.hhs.gov

Contact Information

Joseph Lugo
ADRC/NWD Program Manager
202.795.7391
Joseph.Lugo@acl.hhs.gov