

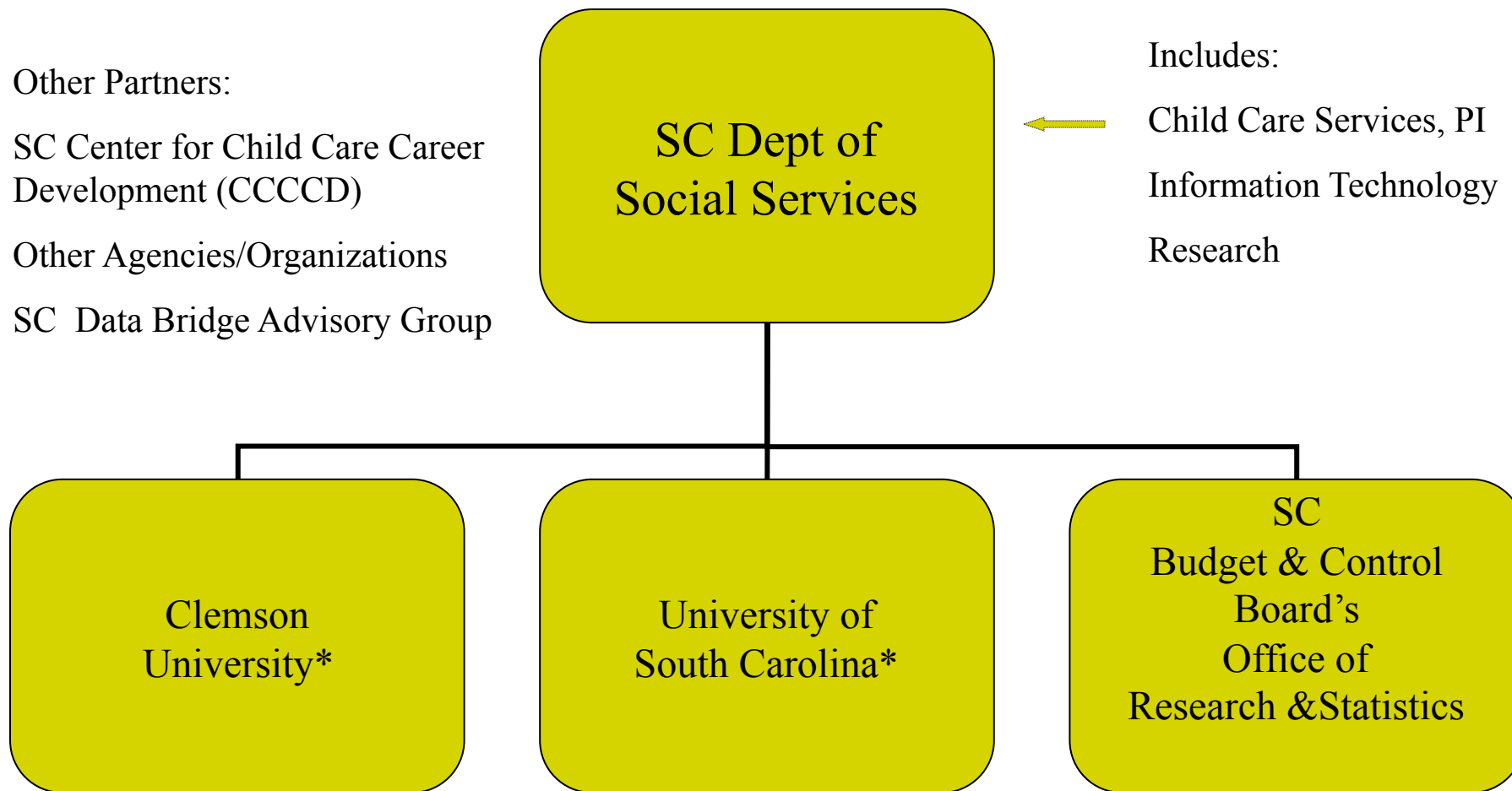


South Carolina's Child Care Data Bridge Project

Building Bridges from Data to Policy to Practice

2009 Annual Meeting of the Child Care Policy
Research Consortium, October 2009

South Carolina's Partnerships



*While Clemson and USC represent the primary research community in the Data Bridge Grant, other entities will participate as appropriate.



Our goals and vision:

Create either new or improved databases w/ the goal to either link to and/or integrate these child care databases and where appropriate integrate with the State's data warehouse

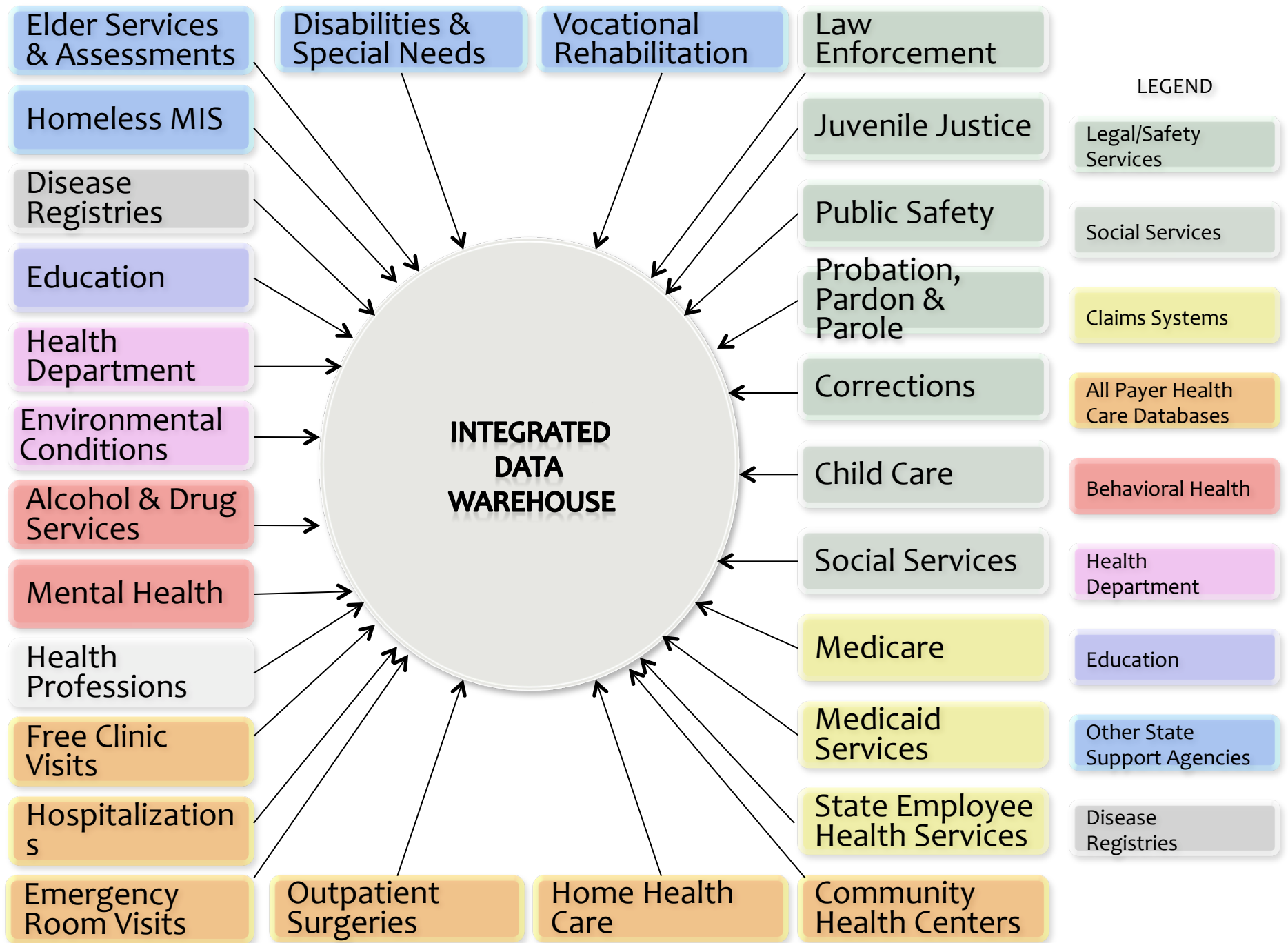
- Create **web-based tools** that access information from your PC
Putting the data into desk-top tools to be accessed by many including: program, quality assurance, researchers and policymakers
- We wanted an **integrated** data infrastructure
For Integration/ linking - common identifiers are the key
To be able to link to outcomes
- Build upon the work at the SC Budget & Control Board's Office of Research & Statistics with the state's integrated data warehouse and cubes (**enhance a strategic partnership**)
- Build upon our current strategic partnerships and develop new partnerships particularly in our **research community**

This investment in our data infrastructure will help provide better quality information and more integrated information for the development of services and policy.



Child Care related databases in SC

- State-regulated centers/providers (licensing provider system)
Built internally by DSS IT staff
- ABC centers/providers (quality provider system)
Built by SC Budget and Control Board, ORS staff
- ABC Voucher/client-child (subsidy system)
Parts under development by DSS IT staff
- Professional development
TEACH & other CCDF funded higher education
Program for Infant/Toddler Care (PITC)
- Technical assistance (registry and reporting)
Built by CCCCDD



Linking helps us “Bridge” to **Outcomes**



Child outcomes

How do our subsidy children perform in school?

Connect from providers to child to outcomes

How do our subsidy children in different types of providers perform in school?

Examine policies

What happens to our providers?

Improvement in quality scores? Increases in what types of deficiencies?

Are providers improving their quality?

Relationships of quality in providers eventually to child outcomes

Do our subsidy children on higher quality providers perform better in school?

As we provide bonus awards to improve quality in providers, will this translate to better child outcomes?

Linking “Bridges”

the Gap for the “Who, What, Where”

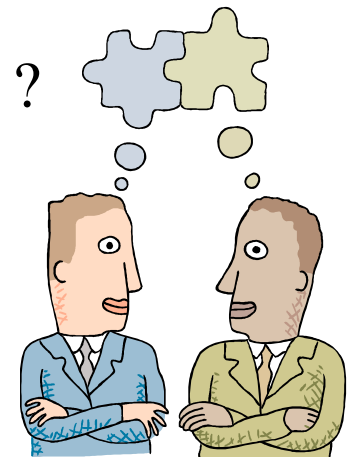
Provides descriptive information critical for operational purposes and research

- Characteristics of the children that we serve?
- Who are the providers serving?
- Are there differences by type of provider? By quality of the provider?
- Where are these providers? Where are the better quality providers?
- Where are our gaps in providers & by provider type ?

Who?

What?

Where?



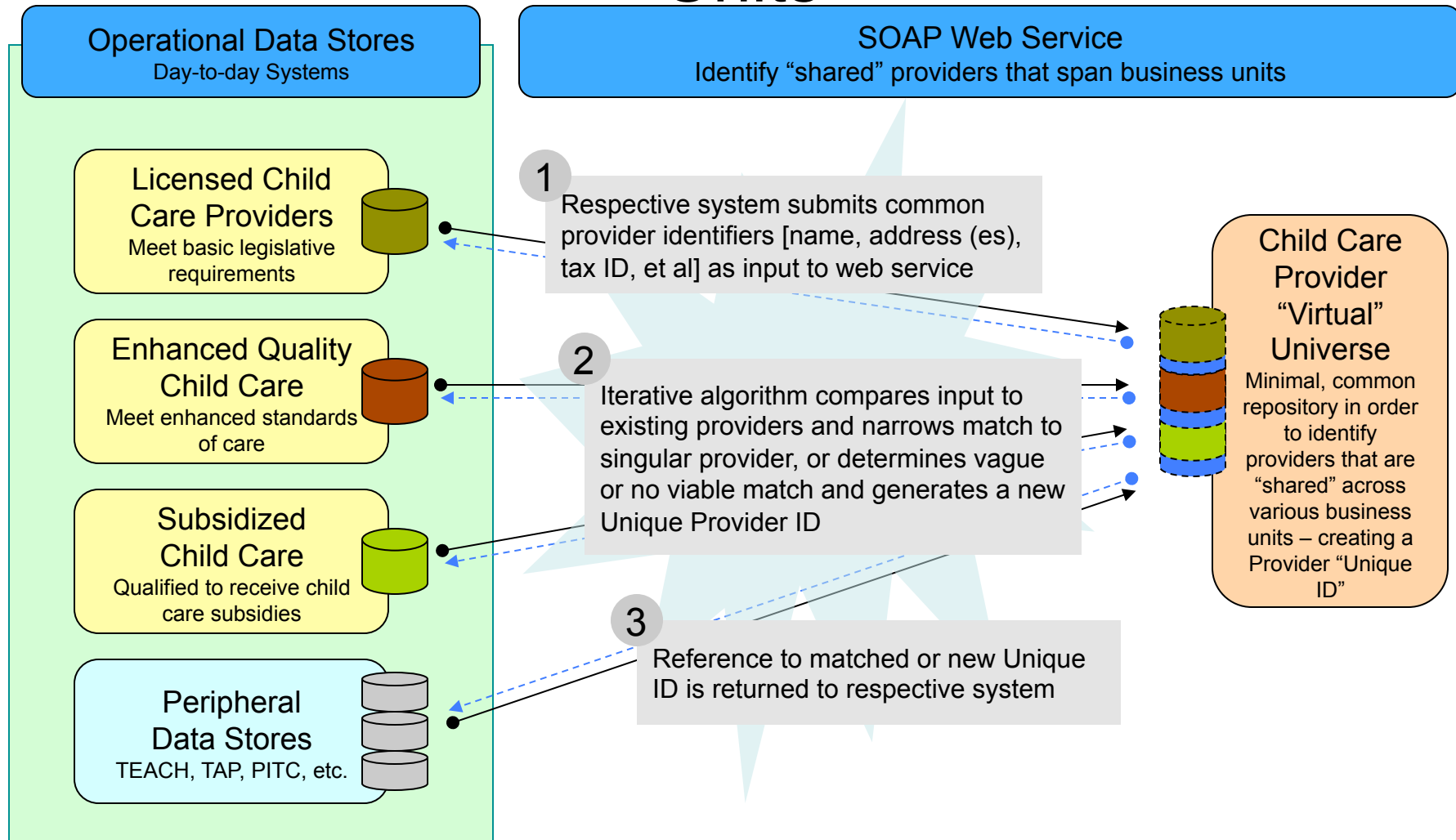
2 Linking Methodologies: Provider & Child

- At the Provider Level

An existing methodology was not available

- Childcare Licensing
 - ABC Quality Provider
 - ABC Voucher
 - Other Provider databases / linkages (to be developed)
- DSS IT developed the methodology for linking providers
 - Methodology had to span across two organizations
 - DSS (for Licensing and ABC Voucher)
 - ORS (for ABC Quality)
 - Web-based application

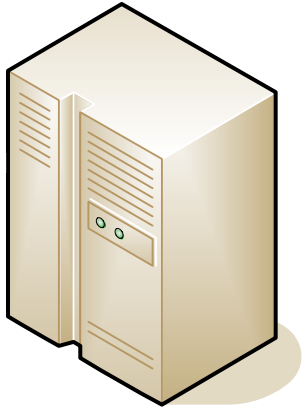
Identifying Unique Child Care Providers across Disparate Systems and Business Units



Linking at the Child (Person) level

The SC Data Bridge project is tapping into an existing methodology that resides with our partner SC Budget and Control Board's ORS

How does linking clients work?



**Client in ABC
Vouchers**

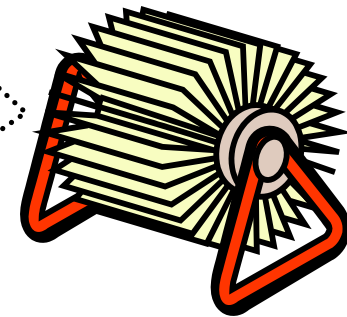


**Client in Other Data
System(s) housed at
ORS**

The respective agency systems housed at ORS submit identifiers for their clients as well as the service information.

A series of algorithms using various combinations of personal identifiers is used to create ORS's Unique ID. Giving ORS the ability to "link across" multiple providers and settings. This allows for linkages while protecting confidentiality of the client.

Data is always "owned" by the originating agencies and permission must be granted to use the data.

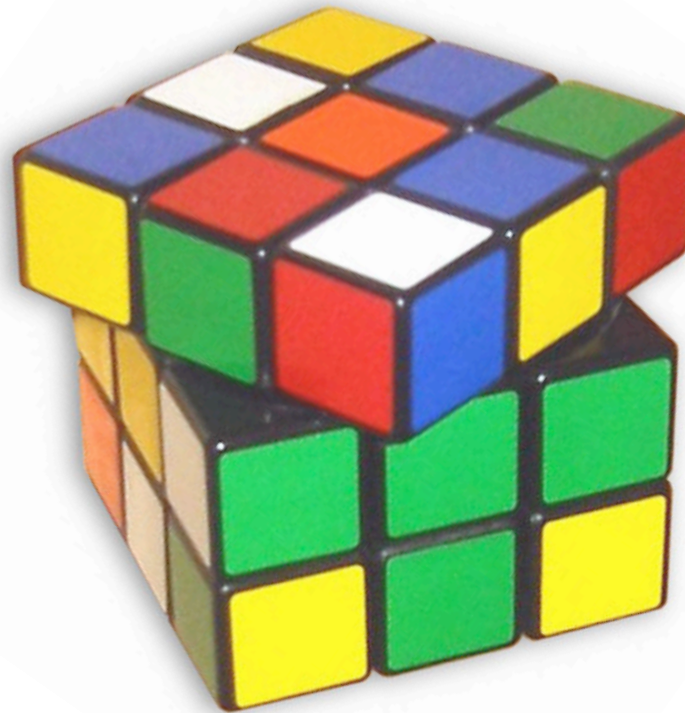


ORS Client Index

Building Cubes: Desk-top Web-based Applications

What Is an Analytic Cube?

- Secure Web-based system
- A way to “slice & dice” lots of data
- Define “slicers” or characteristics
- Pre-aggregate the linked data
- Developed a prelim Provider Licensing Cube





Welcome DSS User 10/8/2009

DSS

Options | Log Off

DSS > DSS Child Care Licensing

Data as of January 2009

Measures by County - Tract - Block Group for Active, Permit Number Not Zero

- Slicers
- Active
- Permit Number Not Zero
- Center Name
- FEIN
- Center Type
- Capacity Group
- Permit Status
- Permit Type
- Sponsor Type
- Complaint Hierarchy
- Complaint Type
- Complaint Category
- Complaint Detail
- Complaint Status
- Deficiency Hierarchy
- Deficiency Type
- Deficiency Category
- Deficiency Detail
- Deficiency Type Missing
- Deficiencies Groups
- Poverty Region
- Rural Urban Region

	Capacity	Caregivers	Facilities	Complaints	Deficiencies	County Census Poverty Percent	Avg Capacity Per Facility	Avg Caregivers Per Facility	Avg Complaints Per Facility	Avg Deficiencies Per Facility
All County - Tract - Block Group	175,918	29,099	3,426	3,758	16,412		51.35	8.49	1.10	4.79
Abbeville	609	87	23	6	13	32.8%	26.48	3.78	0.26	0.57
Aiken	4,910	1,025	69	105	830	31.6%	71.16	14.86	1.52	12.03
Allendale	611	85	9	1	80	65.6%	67.89	9.44	0.11	8.89
Anderson	6,446	1,113	142	176	453	28.5%	45.39	7.84	1.24	3.19
Bamberg	685	132	19	13	170	53.5%	36.05	6.95	0.68	8.95
Barnwell	692	168	19	5	138	45.9%	36.42	8.84	0.26	7.26
Beaufort	5,051	668	108	89	326	29.2%	46.77	6.19	0.82	3.02
Berkeley	6,581	1,012	135	77	526	30.5%	48.75	7.50	0.57	3.90
Calhoun	368	39	9	2	33	37.2%	40.89	4.33	0.22	3.67
Charleston	14,961	2,081	251	343	2,172	36.3%	59.61	8.29	1.37	8.65
Cherokee	1,495	295	37	65	230	32.4%	40.41	7.97	1.76	6.22
Chester	908	136	19	20	153	37.5%	47.79	7.16	1.05	8.05
Chesterfield	1,423	238	37	11	29	39.0%	38.46	6.43	0.30	0.76
Clarendon	1,103	206	31	18	127	46.8%	35.58	6.65	0.58	4.10
Colleton	770	153	44	22	148	46.7%	17.50	3.48	0.50	3.36
Darlington	2,055	418	70	40	144	43.6%	29.36	5.97	0.57	2.06
Dillon	1,560	282	48	28	37	50.4%	32.50	5.88	0.58	0.77
Dorchester	4,384	641	93	33	183	21.3%	47.14	6.89	0.35	1.97
Edgefield	366	80	15	5	50	35.3%	24.40	5.33	0.33	3.33
Fairfield	562	82	14	7	96	41.3%	40.14	5.86	0.50	6.86
Florence	6,778	1,398	233	138	174	35.6%	29.09	6.00	0.59	0.75
Georgetown	1,869	356	60	25	22	39.7%	31.15	5.93	0.42	0.37
Greenville	19,771	3,206	242	448	853	24.5%	81.70	13.25	1.85	3.52

Measures by County - Tract - Block Group for Active, Permit Number Not Zero

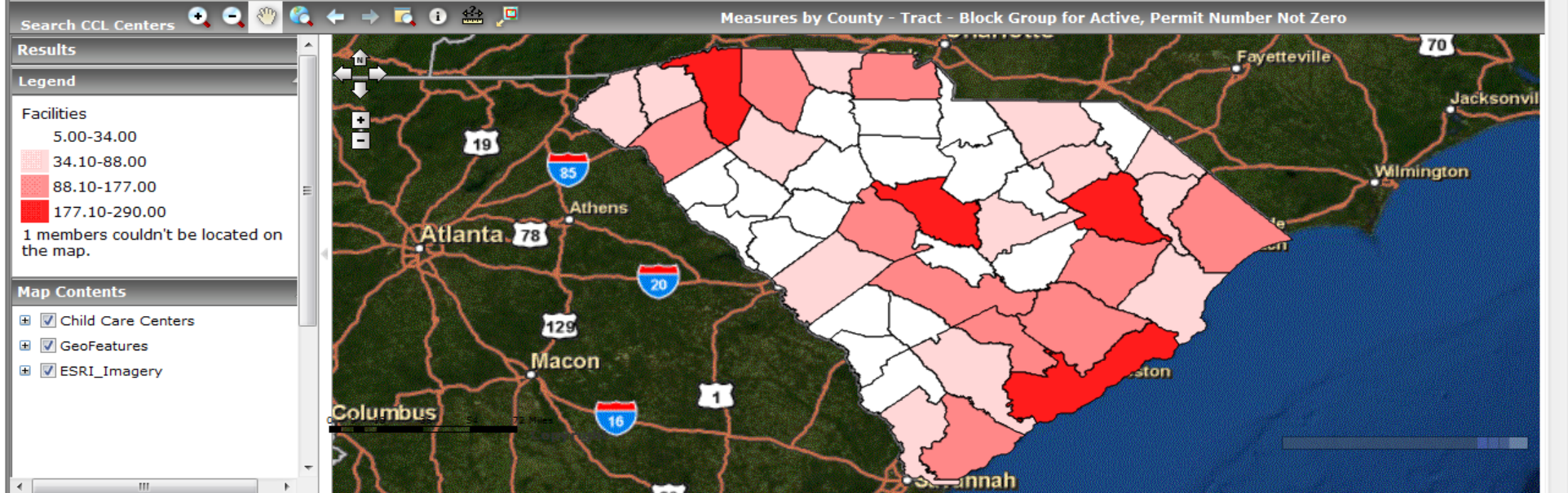
- Slicers
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 - Deficiency Type Missing
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 - Rural Urban Region

		Capacity	Caregivers	Facilities	Complaints	Deficiencies	Tract Census Poverty Percent	Avg Capacity % Per Facility	Avg Caregivers % Per Facility	Avg Complaints Per Facility
Richland	Tract 000100	158	42	3	5	40	47.3%	52.67	14.00	1.67
	Tract 000200	18	7	2	1	8	44.5%	9.00	3.50	0.50
	Tract 000300	42	8	2	1	8	64.6%	21.00	4.00	0.50
	Tract 000400	43	8	2		58	37.2%	21.50	4.00	0.00
	Tract 000500	96	25	1	3	14	83.5%	96.00	25.00	3.00
	Tract 000700	109	11	2		31	22.0%	54.50	5.50	0.00
	Tract 000900	6	2	1			68.8%	6.00	2.00	
	Tract 001000	149	27	2	14	51	90.1%	74.50	13.50	7.00
	Tract 001100	345	43	4	2	25	47.9%	86.25	10.75	0.50
	Tract 001200	208	26	1	2	13	2.4%	208.00	26.00	2.00
	Tract 001300	311	34	3	5	37	63.0%	103.67	11.33	1.67
	Tract 001400	323	58	3	14	43	0.0%	107.67	19.33	4.67
	Tract 001500	405	90	4	3	38	0.0%	101.25	22.50	0.75
	Tract 002100	633	112	3	23	55	9.7%	211.00	37.33	7.67
	Tract 002300	772	157	3		7	5.5%	257.33	52.33	0.00
	Tract 002400	483	62	3	4	31	2.0%	161.00	20.67	1.33
	Tract 002500	289	57	3	18	73	9.6%	96.33	19.00	6.00
	Tract 002601	175	23	4	12	37	50.3%	43.75	5.75	3.00
	Tract 002800	200	57	1	2	18	97.3%	200.00	57.00	2.00
	Tract 010101	416	87	21	4	10	4.5%	19.81	4.14	0.19
Tract 010102	632	138	7	31	80	19.6%	90.29	19.71	4.43	
Tract 010200	104	19	2	2	35	31.2%	52.00	9.50	1.00	
Tract 010303	373	73	9	7	59	10.8%	41.44	8.11	0.78	
Tract 010304	526	70	4	36	81	35.0%	131.50	17.50	9.00	

Measures by County - Tract - Block Group and Deficiency Hierarchy for Active, Permit Number Not Zero

- Slicers
- Active
- Permit Number Not Zero
- Center Name
- FEIN
- Center Type
- Capacity Group
- Permit Status
- Permit Type
- Sponsor Type
- Complaint Hierarchy
- Complaint Type
- Complaint Category
- Complaint Detail
- Complaint Status
- Deficiency Type
- Deficiency Category
- Deficiency Detail
- Deficiency Type Missing
- Deficiencies Groups
- Poverty Region
- Rural Urban Region
- Zip Code

			Capacity	Caregivers	Facilities	Complaints	Deficiencies	Tract Census Poverty Percent	Avg
Richland	Tract 011409	All Deficiency Hierarchy	1,348	195	37	44	186	6.2%	
		Illegal Op						6.2%	
		Illegal Operation						6.2%	
		Missing	439	48	3		16	6.2%	
		Other						6.2%	
		Referral						6.2%	
		Regulatory	1,011	131	9		170	6.2%	
		24 month and younger room	140	21	1		2	6.2%	
		30 month and younger room						6.2%	
		Caregiver/Staff/Resident/Other	682	91	5		31	6.2%	
		Enrollment Violation	506	69	5		12	6.2%	
		Facility	268	34	2		3	6.2%	
		Program Violation	791	104	6		17	6.2%	
		Regulatory Health and Safety	1,005	129	8		101	6.2%	
Reporting/Records	320	40	3		4	6.2%			
	Tract 011410	All Deficiency Hierarchy	282	45	4	5	16	14.8%	
		Illegal Op						14.8%	
		Illegal Operation						14.8%	
		Missing	256	38	2		6	14.8%	
		Other						14.8%	
		Referral						14.8%	
		Regulatory	256	38	2		10	14.8%	
		24 month and younger room						14.8%	
30 month and younger room						14.8%			



Search CCL Centers

Results

Legend

Facilities

- 5.00-34.00
- 34.10-88.00
- 88.10-177.00
- 177.10-290.00

1 members couldn't be located on the map.

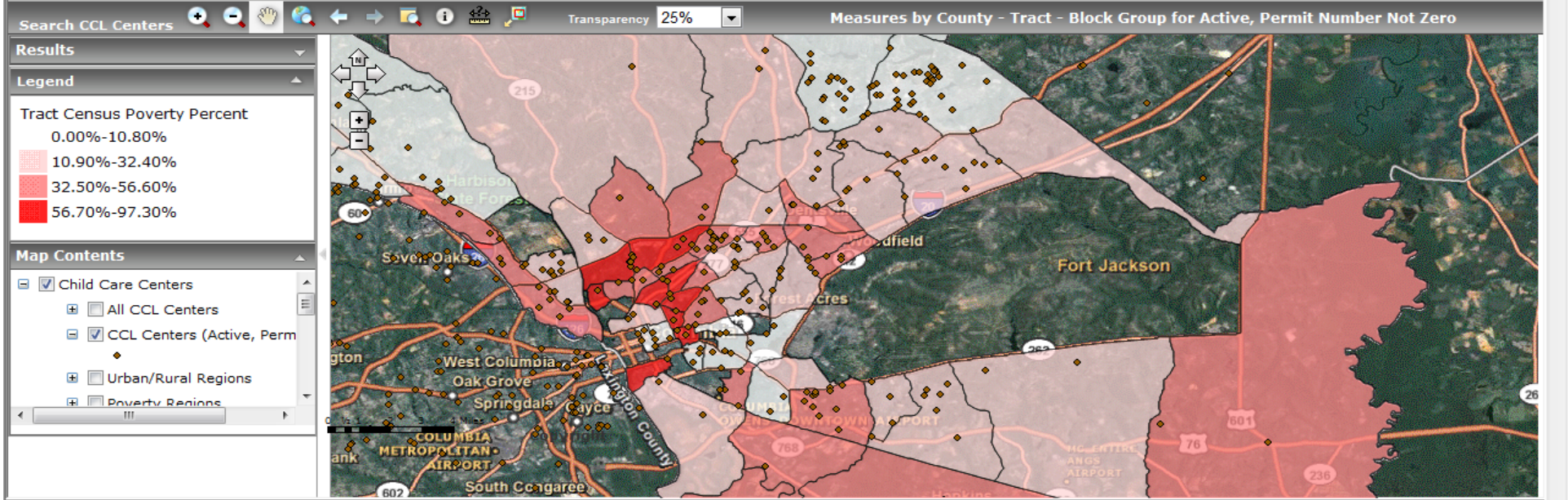
Map Contents

- Child Care Centers
- GeoFeatures
- ESRI_Imagery

Slicers

- Active**
- Permit Number Not Zero**
- Center Name
- FEIN
- Center Type
- Capacity Group
- Permit Status
- Permit Type
- Sponsor Type
- Complaint Hierarchy
- Complaint Type
- Complaint Category
- Complaint Detail
- Complaint Status
- Deficiency Hierarchy

	Facilities	Complaints	Avg Complaints Per Facility	Deficiencies	Avg Deficiencies Per Facility	Caregivers	Avg Caregivers Per Facility	County Census Poverty Percent	Capacity
All County - Tract - Block Group	3,426	3,758	1.10	16,412	4.79	29,099	8.49		175,918
Abbeville	23	6	0.26	13	0.57	87	3.78	32.8%	609
Aiken	69	105	1.52	830	12.03	1,025	14.86	31.6%	4,910
Allendale	9	1	0.11	80	8.89	85	9.44	65.6%	611
Anderson	142	176	1.24	453	3.19	1,113	7.84	28.5%	6,446
Bamberg	19	13	0.68	170	8.95	132	6.95	53.5%	685
Barnwell	19	5	0.26	138	7.26	168	8.84	45.9%	692
Beaufort	108	89	0.82	326	3.02	668	6.19	29.2%	5,051
Berkeley	135	77	0.57	526	3.90	1,012	7.50	30.5%	6,581
Calhoun	9	2	0.22	33	3.67	39	4.33	37.2%	368
Charleston	251	343	1.37	2,172	8.65	2,081	8.29	36.3%	14,961
Cherokee	37	65	1.76	230	6.22	295	7.97	32.4%	1,495
Chester	19	20	1.05	153	8.05	136	7.16	37.5%	908
Chesterfield	37	11	0.30	29	0.78	238	6.43	39.0%	1,423
Clarendon	31	18	0.58	127	4.10	206	6.65	46.8%	1,103



Slicers
 Sponsor Type
 Complaint Hierarchy
 Complaint Type
 Complaint Category
 Complaint Detail
 Complaint Status
 Deficiency Hierarchy
 Deficiency Type
 Deficiency Category
 Deficiency Detail
 Deficiency Type Missing
 Deficiencies Groups
 Poverty Region
 Rural Urban Region
 Zip Code

	Complaints	Avg Complaints Per Facility	Deficiencies	Avg Deficiencies Per Facility	Caregivers	Avg Caregivers Per Facility	County Census Poverty Percent	Tract Census Poverty Percent	Capacity
Richland	532	1.83	2,804	9.67	2,973	10.25	29.9%	17,536	
Tract 000100	5	1.67	40	13.33	42	14.00	29.9%	47.3%	158
Tract 000200	1	0.50	8	4.00	7	3.50	29.9%	44.5%	18
Tract 000300	1	0.50	8	4.00	8	4.00	29.9%	64.6%	42
Tract 000400		0.00	58	29.00	8	4.00	29.9%	37.2%	43
Tract 000500	3	3.00	14	14.00	25	25.00	29.9%	83.5%	96
Tract 000700		0.00	31	15.50	11	5.50	29.9%	22.0%	109
Tract 000900					2	2.00	29.9%	68.8%	6
Tract 001000	14	7.00	51	25.50	27	13.50	29.9%	90.1%	149
Tract 001100	2	0.50	25	6.25	43	10.75	29.9%	47.9%	345
Tract 001200	2	2.00	13	13.00	26	26.00	29.9%	2.4%	208
Tract 001300	5	1.67	37	12.33	34	11.33	29.9%	63.0%	311
Tract 001400	14	4.67	43	14.33	58	19.33	29.9%	0.0%	323
Tract 001500	3	0.75	38	9.50	90	22.50	29.9%	0.0%	405
Tract 002100	23	7.67	55	18.33	112	37.33	29.9%	9.7%	633

Search CCL Centers Web Mapping Application

Results

Clear All

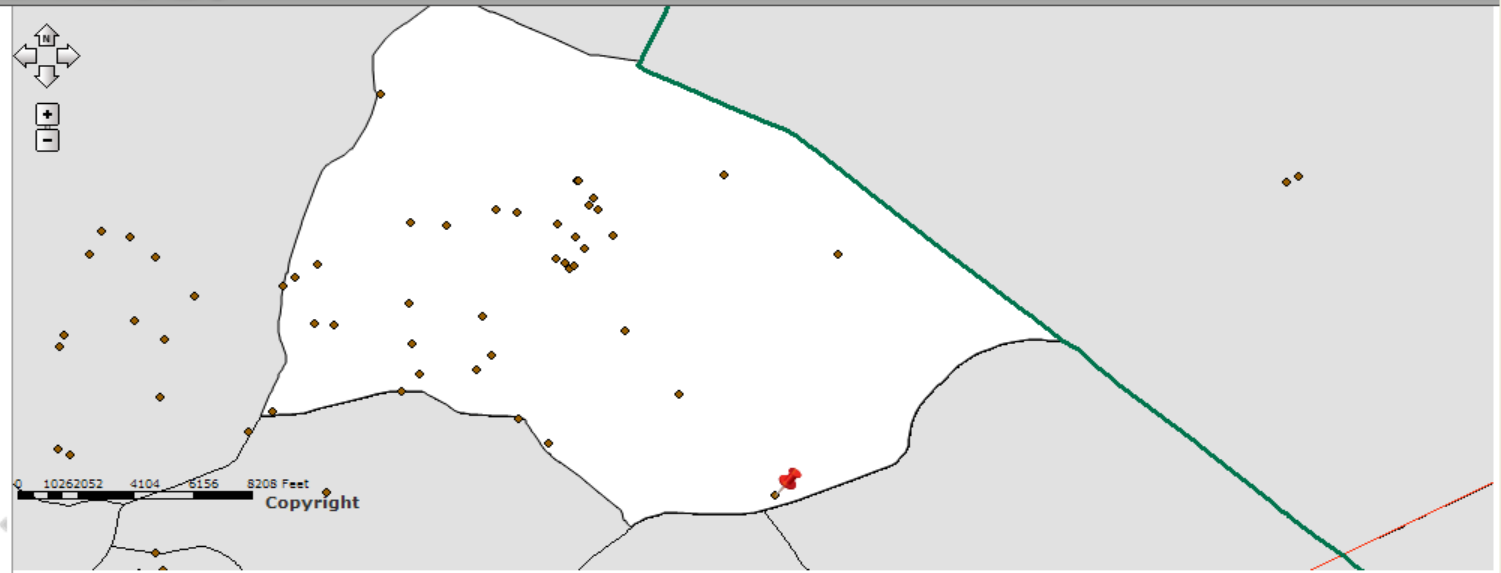
Ca

- CCL Centers (Active, Perm
- Skateland USA Day Ca
- Region 3 / Very Urban (1)

Legend

Map Contents

- Child Care Centers
- GeoFeatures
- ESRI_Imagery



Panorama GIS - Windows Internet Explorer

https://maps.state.sc.us/dssccl/

Google

Favorites Panorama GIS

Data as of January 2009 Sync Map Map Options Print Mode Show Map Only

Search CCL Centers Transparency 75%

Measures by County - Tract - Block Group for Active, Permit Number Not Zero

Map Contents

- Child Care Centers
 - All CCL Centers
 - CCL Centers (Active, Permit
 - Urban/Rural Regions
 - Poverty Regions
- GeoFeatures
 - Emergency Facilities
 - General Geographic Bounda
 - Census Geographic Boundar
 - Health Centers
 - Hospitals
 - Hydrology
 - Landmarks
 - Political Districts
 - Roads
 - SC_Interstates
 - SC_Hwys
 - US_Hwys
 - Schools
 - Colleges
 - Magnet & Charter Sol
 - Private Schools
 - Public Schools
 - Schoold Districts 04
 - Technical Schools
 - Services and Facilities
 - Treatment Facilities
- ESRI_Imagery

Copyright

1248 Feet



Proposed Cubes for Child Care Services

➤ Cubes based on Provider Data

Licensing ← Draft cube now available & in review

ABC Quality Reviews ← Working on slicers for a joint cube w/ Licensing
Information on ABC Voucher Providers

➤ Cubes based on Child Level Data

With agency permissions, use the Integrated Data Warehouse

Begin with ABC Voucher children, DSS TANF & Food Stamp children,
Medicaid

Have drafted some initial slicers using DSS databases (some Medicaid slicers)

Need to receive permission from SC Dept of Health & Human Services (SC's
Medicaid agency)

Eventually want to add slicers (if approved by the agency) from:

Mental Health, Disabilities, & other agencies

SC Dept of Education



SC Pilot of the *Ages & Stages* Questionnaire Online



ASQ Login



Ages & Stages Online Screening Tool

[Login](#)

Login

Password

Log in

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Parent Dashboard



Ages & Stages Online Screening Tool

Children

Herman Knopf | [Account](#) | [Logout](#)

Logged in successfully

Important Documents

[How-To Guide](#)

Children

Elise Knopf  

Open questionnaires

[36 Month Questionnaire for Elise Knopf](#)



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Ages & Stages

Online Screening Tool

Herman Knopf | [Account](#) | [Logout](#)

Children

Elise Knopf

Personal Information

SSN

Date of Birth 05/23/2006

Born Premature? No

Adjusted Age 40 Months Old

Place of Birth

Demographics

Race White

Gender Female

Ethnicity Not Hispanic or Latino

Center & School District Info

Center USC Children's Center

School District Lexington 05

Questionnaires

Mine

[New Questionnaire](#)

[36 Month](#)

Other Users [Rebecca](#)

[Horsey - 36 Month](#) 

[Herman Knopf - 42 Month](#) 



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36 Month Questionnaire

	Yes	Sometimes	Not Yet
COMMUNICATION			
1. When you ask her to point to her nose, eyes, hair, feet, ears, and so forth, does your child correctly point to at least <i>seven</i> body parts? (She can point to parts of herself, you, or a doll.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Does your child make sentences that are three or four words long?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please give an example: <input type="text"/>			
3. Without giving him help by pointing or using gestures, ask your child to "Put the shoe <i>on</i> the table" and "Put the book <i>under</i> the chair." Does your child carry out both of these directions correctly?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. When looking at a picture book, does your child tell you what is happening or what action is taking place in the picture? (For example, "Barking," "Running," "Eating," and "Crying") You may ask, "What is the dog (or boy) doing?"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



36 Month Questionnaire

	Yes	Sometimes	Not Yet
COMMUNICATION			
1. When you ask her to point to her nose, eyes, hair, feet, ears, and so forth, does your child correctly point to at least <i>seven</i> body parts? (She can point to parts of herself, you, or a doll.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Does your child make sentences that are three or four words long?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please give an example: <input type="text"/>			
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4. When looking at a picture book, does your child tell you what is happening or what action is taking place in the picture? (For example, "Barking," "Running," "Eating," and "Crying") You may ask, "What is the dog (or boy) doing?"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Ages & Stages

Online Screening Tool

42 Month Questionnaire Summary (completed by Herman Knopf)

Name	Elise Knopf	SSN	
Date of Birth	05/23/2006	Born Premature?	No
Telephone	Not provided	Relationship to child:	Teacher
Mailing Address		City State, Zip	
Date finalized	September 23, 2009 09:15	Assisted by	
Administered at:	USC Children's Center		

OVERALL:

Do you think your child hears well?	Yes
Do you think your child talks like other children her age?	Yes
Can you understand most of what your child says?	Yes
Do you think your child walks, runs, and climbs like other children his age?	Yes
Does either parent have a family history of childhood deafness or hearing impairment?	No
Do you have any concerns about your child's vision?	No
Has your child had any medical problems in the last several months?	No
Does anything about your child worry you?	No

SCORING: [\(hide cutoff scores\)](#)

Total	0	5	10	15	20	25	30	35	40	45	50	55	60
Communication													
Gross Motor													
Fine Motor													



Pilot To Date

Currently 2 centers enrolled

- 64% Parent Consent to share information w/ SC Data warehouse to link to outcomes
- Parent completion rate of ASQ: 55-60% (1st yr)
- Positive Response for Child Care providers

Recent Developments

- Brookes issuing revised licensing agreement
 - Expand use to 10 additional centers
 - Use ASQ 3 (recently released)
- Recruitment of New Programs to begin ASAP
- Piloting use of “Net-books”