

Profile of centers for independent living based on the National CIL Management Database

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Abstract. In order to create the first comprehensive National CIL Management Database of existing CIL programs, services, management structures and funding resources, data from 255 CILs was collected through mailed surveys. The total revenue of this industry was over \$218.5 million, employing over 4,800 people and offering services and programs to more than 188,000 people with disabilities. A developmental pattern was identified which was similar to other organizations. Further studies were encouraged.

Keywords: Centers for independent living, survey, programs, management, consumers

1. Introduction

The Rehabilitation Research & Training Center on Independent Living Management (RRTC-ILM) created the Independent Living Organizational Survey in December 2000 in order to develop the National Centers for Independent Living (CIL) Management Database to assess existing funding and economic resources and to identify innovative best practices that will create secure economic foundations for CILs. Surveys were mailed to all CILs in April 2001. The survey period was two years. After the first year, the focus was on updating CIL data and gathering information on newly created centers. The most updated aggregate data, based on 293 survey responses, can be obtained by CIL directors, who have been given user names and passwords upon

completion of their surveys, to access the Compendium of Resources for Independent Living Management at <http://www.wnyilp.org/RRTCILM/compendium.html>. The National CIL Management Database and the Compendium of Resources for Independent Living Management are central repositories of nationwide CIL information. Their purpose is to 1) serve the needs of the RRTC-ILM for all research studies, as well as guide dissemination, training, and technical assistance activities, and 2) serve the needs of CILs in comparing their own activities to parameters of any other CILs or to any group of CILs. In the current paper, a brief summary of the national survey conducted in 2001–2003 describing overall CIL managerial behaviors, and a profile of CILs based on the survey data of 247 main CILs, is given. Segmented into five-year periods by centers' ages, the data identifies the developmental pattern of CILs as an industry. Although federally funded CILs have been reporting their annual performances and activities to the Rehabilitation Services Administration (RSA), these reports have not been analyzed in various stages of CILs' life cycles.

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2. Development of the National CIL Management Database

RSA allocated funds for the RRTC-ILM to the Western New York Independent Living Project, Inc., a center for independent living, in November 2000. First steps included identifying and locating all CILs and creating a mailing list or central database to support future training needs. While there are many web-based lists of centers for independent living, close examination and telephone calls revealed that not all centers listed were actually centers for independent living. RRTC-ILM staff proceeded to cull existing lists into a central database and to telephone each listing asking for CIL name, address, telephone numbers and current executive director. In addition, staff asked if they met the 725 standards [1]. The resulting CIL Directory was reduced from 900 data entries to the current 627 centers that include main CILs and their branch or satellite offices. This became the list of our constituents. Daily maintenance of the CIL Directory is on going with a web-based listing publicly accessible at <http://www.wnyilp.org/database/directory.php>.

Concurrently, RRTC-ILM investigators created a survey instrument called the Independent Living Organizational Survey. It consists of six sections: demographic information (executive director, name and location of CIL, and number of staff); organizational structure information; existing formal training and development offered in-house; program and services provided by the CIL above and beyond the four core services, including any special expertise; staffing and salary information and revenues and sources of funds. After initial drafts were completed, the survey instrument was sent to the RRTC-ILM Steering Council, which consists of ten CIL executive directors and state independent living councils (SILCs) directors. They were asked to assess the instrument and add any items that they felt pertinent to understanding CIL managerial practices. Several revisions took place. All Steering Council members completed the final Independent Living Organizational Survey. After final revisions, the survey instrument was mailed to 630 CILs in April 2001. Repeated mailings, follow-up telephone calls, multiple waves of e-mail messages, and in person contacts with executive directors at national conferences and at RRTC-ILM training events resulted in 223 completed surveys within the first year (April 1, 2001 to April 1, 2002).

As each survey arrived, data was entered into the National CIL Database (an in-house database). The RRTC-ILM staff continues to seek surveys from all

CILs nationwide. The CIL Directory and the National CIL Database are the basic tools for all RRTC-ILM projects. Various data reports on CILs that had small businesses, transition programs for youth, vocational rehabilitation collaborations, and other subset categories were provided to all RRTC-ILM principal investigators.

By summer 2002, over 250 surveys were completed. Creation of a database for CIL executive directors and managers to use in day-to-day managerial activities was a logical outcome. Executive directors who completed surveys were asked to submit copies of their policies, procedures, mission/vision statements, employee and board job descriptions, procedure manuals, board committee structures, employee orientation handbooks and more. Within the first year, dozens of directors gave over 500 documents to the RRTC-ILM. The sources of information and identifying information were removed from the documents. Combining the aggregate survey data with these CIL management documents resulted in the Compendium of Resources for Independent Living Management. When a survey is completed, a user name and password is assigned to the executive director. Across the country, CIL managers are using and contributing to the Compendium. At this writing, the Compendium is comprised of data from nearly 300 CIL surveys and over 650 documents. This web-based search engine is the work of CIL executive directors who continue to update, contribute to, and use the data in their day-to-day CIL management.

Due to the ever-changing nature of nonprofit business, the CIL Directory and the Compendium are in a state of constant revision and addition. New CILs are added, branches that become main CILs are noted, new directors and locations are changed. As annual update surveys arrive, the salary and financial resource information is added to the Compendium to ensure that average sums for salaries and financial resources are current.

3. Summary of the National CIL Management Database

The survey consisted of six parts: Part 1 (Demographic Information), Part 2 (Organizational Structure), Part 3 (Training/Staff Development), Part 4 (Program Information), Part 5 (Staffing/Salary), and Part 6 (Revenue & Sources). Table 1 summarizes the survey of 255 main CILs. Some CILs did not complete all sections of the survey. Due to this missing data, analyses

Table 1
Summary of independent living organizational survey ($N = 255$)

<i>Part 1 (Demographic Information)</i>				
Submit Section 704 Annual Report	Yes 196 (76.9%)			
	Total	Mean	SD	Median
Number of Full Time Staff ($n = 250$)	3259	13.0	14.8	9.0
Number of Part Time Staff ($n = 239$)	1551	6.5	15.9	3.0
Number of Volunteer Staff ($n = 214$)	2805	13.1	35.0	4.0
Number of Consumers ($n = 226$)	188389	833.6	977.1	450
<i>Part 2 (Organizational Structure)</i>				
Number of Departments	713.5	3.9	3.0	3.0
Number of Upper-Level Management	465.8	1.9	1.3	1.0
Number of Mid-level Management	364.0	2.0	1.9	2.0
Number of Supervisors	322.0	2.0	2.7	1.0
Number of Direct Services Staff	2587.4	11.2	19.4	6.0
Number of Support Staff	713.3	3.2	4.2	2.0
<i>Part 3 (Training/Staff Development)</i>				
Staff Orientation ($n = 241$)	199	82.6%		
Systems Change Advocacy ($n = 241$)	117	48.5%		
IL Philosophy/History ($n = 241$)	197	81.7%		
Benefit Consultation ($n = 241$)	120	49.8%		
ADA and Related Regulations ($n = 241$)	158	65.6%		
Self-Advocacy ($n = 241$)	115	47.7%		
Peer Counseling Skills ($n = 241$)	140	58.1%		
Time Management Skills ($n = 241$)	54	22.4%		
Computer Skills ($n = 241$)	105	43.6%		
Cultural Diversity ($n = 241$)	77	32.0%		
Communication Skills ($n = 241$)	62	25.7%		
<i>Part 4 (Program Information)</i>				
Community Education (disability awareness) ($n = 254$)	241	94.9%		
Transitional Services for Youth ($n = 254$)	129	50.8%		
Family Support Services ($n = 254$)	117	46.1%		
Case Management ($n = 254$)	130	51.2%		
Rehabilitation Counseling ($n = 254$)	42	16.5%		
Consumer Directed Personal Assistance Services ($n = 254$)	146	57.5%		
In Home Health Care ($n = 254$)	24	9.4%		
Mental Health Programs ($n = 254$)	71	28.0%		
Peer Run Support ($n = 254$)	69	27.2%		
Out Patient Treatment ($n = 254$)	6	2.4%		
Club House or Social Club ($n = 254$)	18	7.1%		
Business Enterprise ($n = 254$)	57	22.4%		
Assistive Technology Training ($n = 254$)	149	58.7%		
Rehabilitation Teaching for the Blind ($n = 254$)	39	15.4%		
Mobility Training for Blind/Low Vision ($n = 254$)	43	16.9%		
Braille ($n = 254$)	80	31.5%		
Audio Recording ($n = 254$)	59	23.2%		
Sign Language Interpreting ($n = 254$)	95	37.4%		
Transportation Service ($n = 254$)	83	32.7%		
Employment Assistance ($n = 254$)	134	52.8%		
Respite Care ($n = 254$)	17	6.7%		
Elderly Disabled Programs ($n = 254$)	79	31.1%		
Literacy ($n = 254$)	39	15.4%		
Certified/Accredited Programs	48	18.9%		

Table 1, continued

<i>Part 5 (Staffing/Salary)</i>						
Positions (#, # of FTE, salary range in thousands of dollars) (<i>n</i> = 246)	Total	Mean	SD	Median	Minimum \$ in thousands	Maximum \$ in thousands
Executive Directors or CEOs						
Number of position	241	1.0	0.1	1.0		
Number of FTE	226	1.0	0.1	1.0		
Salary range					<20	91–95
Department Heads						
Number of position	262	1.1	1.6	0.0		
Number of FTE	231	1.0	1.6	0.0		
Salary range					<20	56–60
Supervisors/Managers						
Number of position	339	1.4	1.8	1.0		
Number of FTE	301	1.3	1.8	1.0		
Salary range					<20	56–60
Peer Counselors						
Number of position	396	1.6	5.0	0.0		
Number of FTE	180	0.8	2.0	0.0		
Salary range					<20	31–35
Advocates						
Number of position	354	1.5	7.6	0.0		
Number of FTE	185	0.8	2.0	0.0		
Salary range					<20	36–40
IL Specialists						
Number of position	743	3.1	3.8	2.0		
Number of FTE	576	2.5	2.7	1.6		
Salary range					<20	36–40
Information Referral Specialists						
Number of position	109	0.4	1.0	0.0		
Number of FTE	81	0.3	0.9	0.0		
Salary range					< 20	31–35
Architectural Consultants						
Number of position	25	0.1	0.3	0.0		
Number of FTE	15	0.1	0.2	0.0		
Salary range					<20	46–50
Case Managers						
Number of position	246	1.0	3.9	0.0		
Number of FTE	216	0.9	3.5	0.0		
Salary range					<20	36–40
Assistive Technology Instructor						
Number of position	53	0.2	0.6	0.0		
Number of FTE	42	0.2	0.5	0.0		
Salary range					<20	41–45
Teachers of the Blind						
Number of position	22	0.1	0.5	0.0		
Number of FTE	14	0.1	0.3	0.0		
Salary range					<20	31–35
Employment Specialists						
Number of position	108	0.4	1.8	0.0		
Number of FTE	90	0.4	1.7	0.0		
Salary range					<20	41–45
Benefits Consultant						
Number of position	110	0.5	1.0	0.0		
Number of FTE	82	0.4	0.9	0.0		
Salary range					<20	36–40
Community Education Instructors						
Number of position	33	0.1	0.6	0.0		
Number of FTE	23	0.1	0.4	0.0		
Salary range					<20	41–45
Peer/Support Group Coordinators						
Number of position	42	0.2	0.7	0.0		
Number of FTE	30	0.1	0.6	0.0		
Salary range					<20	41–45

Table 1, continued

Deaf Services Coordinator						
Number of position	59	0.2	0.5	0.0		
Number of FTE	49	0.2	0.5	0.0		
Salary range					<20	51–55
Intake Managers						
Number of position	19	0.1	0.3	0.0		
Number of FTE	13	0.1	0.2	0.0		
Salary range					<20	31–35
Secretaries						
Number of position	212	0.9	1.3	0.0		
Number of FTE	164	0.7	1.2	0.0		
Salary range					<20	31–35
Administrative Assistants						
Number of position	243	1.0	1.8	1.0		
Number of FTE	198	0.8	1.5	0.8		
Salary range					<20	41–45
Sign Language Interpreters						
Number of position	30	0.1	0.5	0.0		
Number of FTE	25	0.1	0.5	0.0		
Salary range					<20	36–40
Foreign Language Interpreters						
Number of position	13	0.1	0.5	0.0		
Number of FTE	6	0.0	0.3	0.0		
Salary range					<20	26–30
Drivers (community or staff support)						
Number of position	96	0.4	1.4	0.0		
Number of FTE	47	0.2	0.7	0.0		
Salary range					<20	20–25
Personal Care Aides (staff assist)						
Number of position	172	0.7	6.8	0.0		
Number of FTE	123	0.5	6.4	0.0		
Salary range					<20	26–30
Personal Care Attendants Community						
Number of position	4512	18.6	109.8	0.0		
Number of FTE	1858	7.9	57.1	0.0		
Salary range					<20	31–35
Sanitation/Janitorial Staff						
Number of position	40	0.2	0.5	0.0		
Number of FTE	18	0.1	0.3	0.0		
Salary range					<20	20–25
Readers						
Number of position	50	0.2	2.4	0.0		
Number of FTE	2	0.0	0.1	0.0		
Salary range					<20	31–35
Accountants/Bookkeepers						
Number of position	173	0.7	1.0	1.0		
Number of FTE	130	0.6	0.9	0.0		
Salary range					<20	61–65
Computer System Technicians						
Number of position	34	0.1	0.4	0.0		
Number of FTE	24	0.1	0.4	0.0		
Salary range					<20	41–45
Fund Raiser/Grant Writer						
Number of position	40	0.2	0.4	0.0		
Number of FTE	30	0.1	0.3	0.0		
Salary range					<20	46–50
Public Relations						
Number of position	22	0.1	0.3	0.0		
Number of FTE	14	0.1	0.2	0.0		
Salary range					<20	41–45
Community Outreach Coordinator						
Number of position	77	0.3	0.8	0.0		

Table 1, continued

Number of FTE	53	0.2	0.6	0.0	<20	36-40
Salary range						
<i>Part 6 (Revenue & Sources) (n = 243)</i>						
(Range in thousands of dollars)	Total	Mean	SD	Median		
Total Revenue (n = 218)	218545	1002	1942	482		
	Number of Grants	Minimum	Maximum			
Federal Sources Total	298					
Dept of Education	178	<10	951-1000			
Dept of Health	12	<10	2600-3000			
Dept of Labor	11	10-25	251-300			
Human Services	11	<10	301-350			
Social Security	45	<10	251-300			
Other	41	<10	701-750			
State Sources Total	333					
Dept of Education	52	<10	751-800			
Dept Mental Health	16	<10	951-1000			
MR/DD	26	<10	251-300			
Blind Voc Rehab	30	<10	651-700			
Other Voc Rehab	101	<10	751-800			
Social Services	28	<10	>3000			
Other	80	<10	>3000			
County	63	<10	801-850			
City/Local	69	<10	301-350			
United Way	94	<10	301-350			
Foundations	95	<10	951-1000			
Fund Raising Events	140	<10	201-250			
Memberships	45	<10	26-50			
Other sources	40	<10	401-450			
Fee for Service Revenue						
State VR Programs	64	<10	>3000			
CD-PAS	28	<10	>3000			
Transportation	20	<10	76-100			
Medicaid	42	<10	>3000			
Sign Language	25	<10	101-150			
Private VR	1	<10*	<10*			
Endowments	11	<10	26-50			
Business activity	45	<10	501-550			
Other	56	<10	251-300			

*Only one CIL had private VR.

were not always based on all centers, in which case, the number of centers used for analysis was indicated.

Part 1: Demographic Information

Table 1, Part I, presents some of the demographic information collected by the survey. Total (summation of frequency of all centers), mean (number indicating average number per center), standard deviation (variability) and median (the middle number) are presented. Two hundred fifty-five CILs (some had missing data) employed over 4,800 people (20 employees per CIL), had 2,805 volunteers (13 volunteers per center) and served just over 188,000 consumers (834 consumers per center).

Part 2: Organizational Structure

Table 1, Part 2 presents organizational structure in total, mean, standard deviation and median. It also shows frequency of CILs that offer particular employee benefits and the percentage of total centers. There were

close to 830 employees in management positions (4 managers per center), 322 supervisors (2 per center), and 3,300 staff (14 per center). Regarding employee benefits, almost all CILs offered paid vacation (99%), paid sick leave (96%) and health care (89%). Other benefits provided were dental care (66%), life insurance (56%) and retirement plans (49%). In addition, 88 different benefits were provided. Frequent Other answers included disability insurance, holidays, vision care, flextime, and 403B.

Part 3: Training/Staff Development

Table 1, Part 3 presents in-house formal programs for training and staff development in frequency and percentage. These programs (in order of the most frequent to the least) are: staff orientation (83%), IL philosophy/history (82%), Americans with Disabilities Act (ADA) and related regulations (66%), peer counseling skills (58%), benefit consultation (50%), systems

change advocacy (49%), self-advocacy (48%), computer skills (44%), cultural diversity (32%), communication skills (26%), and time management skills (22%). Fifty-three Other answers were reported. Frequent other training programs included assistive technology, housing, leadership development, case management, media relations, and team building.

Part 4: Program Information

Table 1, Part 4 presents programs and services in frequency and percentage. CILs are required to offer the four core services: independent living skills training, advocacy, information and referral, and peer counseling. In addition, CILs offer many other programs. The most common service is community education (95%). Other programs (from the most frequently offered to the least) are: assistive technology training (59%), consumer directed personal assistance services (58%), employment assistance (53%), transitional services for youth and case management (both 51%), family support services (46%), sign language interpreting (37%), transportation service (33%), braille (32%), and programs for elderly with disability (31%), mental health programs (28%), audio recording (23%), business enterprise (22%), mobility training for blind/low vision and rehabilitation counseling (both 17%), rehabilitation teaching for the blind and literacy (both 15%). The rest are in-home health care (9%) and respite care (7%). One hundred ten other services were offered. Frequently mentioned programs include benefits counseling, computer literacy, home modification, housing services, and nursing home transition. In addition, forty-eight centers (19% of total CILs) reported that some of their programs were certified by the Department of Education, the Department of Health, RSA and individual state accreditation offices (not in Table 1).

Part 5: Staffing/Salary

The Independent Living Organizational Survey listed 31 job titles and a category called "other." In Table 1, Part 5 lists total number, mean, standard deviation, median for numbers of staff and full time equivalence (FTE) and the starting salary ranges. These positions can be grouped into five categories: administration, community relations, peer support -direct service, peer support - indirect service, and physical plant. The Administrative Category consists of nine job titles: executive director or CEO, department head, supervisors/managers, secretaries, intake managers, administrative assistants, staff assistants, accountant/bookkeeper, and fundraiser/grant writer. Within the Administration Category, there were 1680

staff and 1339 FTE. The mean for staff was 7 members and 6 FTE per center. The Community Relation Category consists of four job titles: advocates, community education instructors, public relations and community outreach coordinator. There were 364 staff and 259 FTE, in total. The mean for staff was 1.5 per center and 1.2 FTE. The Direct Service Category consisted of eleven job titles: peer counselors, independent living specialists, information referral specialists, case managers, assistive technology instructors, teachers of the blind, employment specialists, benefits consultants, deaf services coordinators, drivers and personal care attendant community assistants. There were 6394 staff and 2988 FTE in total and the means were 27 staff and 14 FTE per center. The Indirect Service Category consisted of five job titles: architectural consultants, peer/support group coordinators, sign language interpreters, foreign language interpreters, and readers. There were 162 staff and 76 FTE in total, and an average of 0.7 staff and 0.3 FTE per center. The Physical Plant Category consisted of two job titles: sanitation/janitorial and computer system technicians. There were 73 staff and 41 FTE in total and an average of 0.3 staff and 0.2 FTE per center.

Part 6: Revenue & Sources

Table 1, Part 6, presents revenue in total, mean, standard deviation and median as well as various revenue sources (in thousands of dollars). Total revenue of 218 centers was over \$218.5 million. The revenue distribution was positively skewed. The mean was \$1 million dollars per center, the median was \$ 482,000. Two hundred forty-three centers acquired 298 funds from Federal sources (Department of Education, Health, Labor and Human Services, Social Security and others) and 178 centers received funds from the Department of Education, ranging from less than \$10,000 to between \$ 951,000 and \$1 million. The Department of Health funded 12 CILs with a maximum of between \$2.6 and \$ 3 million. The second most frequent Federal source of revenue was Social Security (45), followed by the Department of Labor (11) and the Department of Health and Human Services (11).

Three hundred thirty-three CILs received funding from State sources (Departments of Education, MRDD, Vocational Rehabilitation for the Blind, Social Services and others). The maximum amount of funding came from Social Services and the Department of Public Welfare, both more than \$3 million. Combining sources from County, City, Local, United Way, Foundations, Fundraising events, Membership and Other, 626 different funding sources were reported. The most fre-

quent source in this category was fundraising events, with the highest amount (between \$951,000 and \$1 million) coming from Foundations. Finally, 292 funds were identified from Fee for Service; the most frequent source was from State Vocational Rehabilitation (VR) Programs (64). The highest amount of funding (more than \$3 million) came from two sources: state VR Programs and Medicaid.

4. Patterns of CIL management

4.1. Relationship between managerial elements

Based on the descriptive statistics in the previous section, we attempted to find inter-variable relationships to seek management patterns using a cross-sectional approach. First, bi-variate correlations among variables using Pearson correlation coefficients were identified. Figure 1 describes the relationship among major variables that showed the highest inter-variable correlations with Pearson correlation coefficients of 0.29 and higher ($p < 0.01$). The variables in Fig. 1 are number of years of existence (Years), total amount of revenue (Revenue), number of funding sources (Number of Sources), number of full time staff (Full-Time Staff), number of departments (Number of Departments), number of programs offered (Number of Programs) and number of consumers (Number of Consumers). We conceptualized that the age of CILs (Years) and financial resources (Revenue and Number of Sources) will determine organizational structure (Full-Time Staff and Number of Departments) which will lead to services (Number of Programs), and finally end with the quantitative outcome (Number of Consumers). However, Number of Consumers may redefine organizational structures and financial situations. Therefore, all management elements (variables) are positively related but do not necessarily have causal relationships (note the variables are not related with one-way arrows in Fig. 1). The only exogenous variable here is years of existence that will not be influenced by other variables. Years have significant correlations with five elements: low correlation with Revenue (0.29), Number of Departments (0.30) and Number of Consumers (0.29), and medium correlation with Number of Sources (0.40) and Full-Time Staff (0.41). Number of Sources has five low correlations with Years, Revenue (0.35), Full-Time Staff (0.38), Number of Departments (0.39) and Number of Programs (0.30). Number of Sources does not have a significant correlation with Number of Consumers.

Revenue is a strong cause of Full-Time Staff (0.82), and somewhat related with Number of Departments (0.38) and Number of Consumers (0.31). Full-Time Staff is mildly correlated with Number of Departments (0.49) and has a low correlation with Number of Consumers (0.39). Number of Departments is somewhat related with Number of Programs (0.34) and has the highest correlation with Number of Consumers (0.43). Number of Programs is related with only two elements: Number of Sources and Number of Departments, and it is one of the two elements that are not significantly related to Number of Consumers. Number of Consumers is significantly related with Years, Revenue, Full-Time Staff, and Number of Departments but the strongest pathway appears from Revenue to Full-Time Staff to Number of Departments to Number of Consumers. Number of Consumers is not significantly related to either Number of Sources or Number of Programs. The only variable that has a significant relationship with all other variables was Number of Departments.

4.2. Profile of CIL management by five year increments

Since Years (age of CILs) is the only variable among seven management elements that is not influenced by other variables, and, since it is the easiest way to measure CILs' development, we viewed the age of a CIL as an independent variable. A five-year interval was arbitrarily selected. It divided CILs in the National Centers for Independent Living (CIL) Management Database into six groups. Due to missing data, the number of CILs in each group varies depending on analyses. The largest category is 20–25 years ($n = 58$), then 10–15 years ($n = 52$), then 5–10 years ($n = 49$), followed by 15–20 years ($n = 41$). The smallest categories are less than 5 years ($n = 20$) and over 25 years ($n = 17$). Comparisons of six periods for each major variable were made using One-Way ANOVA. Tables present the summary of results, with probability of less than .05. Post-hoc analyses were conducted, but the results were omitted in this paper due to length.

4.3. Financial status

Table 2 summarizes financial status including Total Revenue, Number of Revenue Sources in mean and standard deviation, and the number and frequency of Federal, State and Local/Other Sources and Fee for Services. Table 2 also includes the number of types of sources of Federal, State, Local/ Other Sources and

Table 2
Financial status by five-year increment

# of CILs	< 5 Years <i>n</i> = 20	5–10 Years <i>n</i> = 49	10–15 Years <i>n</i> = 52	15–20 Years <i>n</i> = 41	20–25 Years <i>n</i> = 58	> 25 Years <i>n</i> = 17
Total Revenue	241,275	382,324	628,614	1,492,283	1,486,339	2,092,534
(\$ Mean/(SD)**	(160,328)	(307,265)	(891,643)	(2,758,186)	(2,447,501)	(2,916,198)
# of Sources Mean/(SD)***	4.4 (2.2)	5.1 (2.4)	6.0 (2.5)	6.4 (3.2)	8.0 (3.5)	8.2 (2.4)
Federal sources	11	41	42	28	57	16
Frequency (%)***	(55.0%)	(83.7%)	(80.8%)	(68.3%)	(98.3%)	(94.1%)
State sources	17	36	45	37	52	16
	(85.0%)	(73.5%)	(86.5%)	(90.2%)	(89.7%)	(94.1%)
Local sources	13	40	42	34	53	16
	(65.0%)	(81.6%)	(80.8%)	(82.9%)	(91.4%)	(94.1%)
Fee for Service***	7	23	39	26	48	16
	(35.0%)	(46.9%)	(75.0%)	(63.4%)	(82.8%)	(94.1%)
1 type of sources	3	4	1	1	0	0
	(15.0%)	(8.2%)	(1.9%)	(2.4%)		
2 types of sources	7	14	7	10	3	0
	(35.0%)	(28.6%)	(13.5%)	(24.4%)	(5.2%)	
3 types of sources	9	16	23	16	16	4
	(45.0%)	(32.7%)	(44.2%)	(39.0%)	(27.6%)	(23.5%)
4 types of sources	1	15	21	14	39	13
	(5.0%)	(30.6%)	(40.4%)	(34.1%)	(67.2%)	(76.5%)

p* < 0.05; *p* < 0.01; ****p* < 0.001.

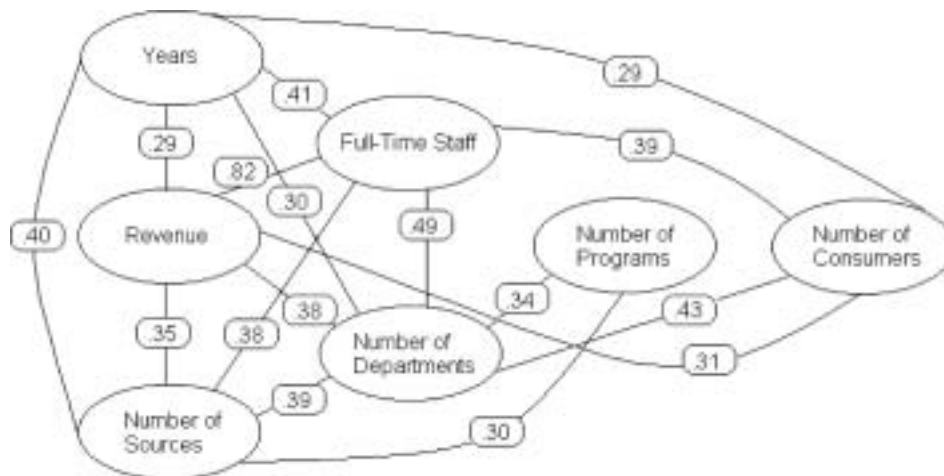


Fig. 1. Correlations between major variables.

Fee for Service. Therefore, the category “Two Types of Sources” means any two sources above and “Four Types of Sources” means all sources. In CILs that are less than 5 years old, the total revenue was \$241,000. Total revenue increased until 15–20 years, with the largest increase occurring between 10–15 years and 15–20 years. The dollar amount increase was approximately \$834,000. For the next five years (20–25), funding levels tapered off; and again, between years 20–25 years and over 25 years, it increased by \$606,000. The older CILs (more than 25 years) acquired \$2.1 million. Using Land and Jarman’s terms (1992), the six age periods can be perceived as three stages: 0–15 years as a

formative stage, 15 to 25 years may be a norming stage and over 25 years as a fulfilling stage. The F-value of Total Revenue was significant at *p* < 0.01. Similarly, the number of revenue sources showed an increment, with every 10 years grouped together. The F-value for the number of sources was significant at *p* < 0.001. More detailed examination of revenue sources show that CILs tap into governmental sources within the first ten years and then add Fee for Service revenue after ten years. The F-values for Federal Sources and Fee for Services were significant at *p* < 0.001 but State and Local/Other Sources were not significant. Only 5% of CILs younger than 5 years old sought all four types

Table 3
Organizational structure and staffing

	< 5 Years Means (SD) <i>n</i>	5–10 Years Means (SD) <i>n</i>	10–15 Years Means (SD) <i>n</i>	15–20 Years Means (SD) <i>n</i>	20–25 Years Means (SD) <i>n</i>	> 25 Years Means (SD) <i>n</i>
Number of Departments***	2.6 (3.0) <i>n</i> = 13	2.6 (1.7) <i>n</i> = 34	3.8 (2.8) <i>n</i> = 38	3.8 (3.5) <i>n</i> = 30	4.5 (3.0) <i>n</i> = 47	6.1 (3.4) <i>n</i> = 17
Number of Full-Time Staff***	5.3 (4.4) <i>n</i> = 20	6.3 (4.0) <i>n</i> = 50	8.9 (7.2) <i>n</i> = 53	17.1 (20.5) <i>n</i> = 40	17.9 (16.4) <i>n</i> = 62	23.7 (10.7) <i>n</i> = 18
Number of Part-Time Staff*	2.9 (2.2) <i>n</i> = 19	3.4 (3.7) <i>n</i> = 47	3.2 (2.7) <i>n</i> = 49	7.8 (17.5) <i>n</i> = 38	11.5 (26.7) <i>n</i> = 61	8.4 (10.7) <i>n</i> = 18
Number of Volunteer	3.8 (3.5) <i>n</i> = 17	7.5 (15.2) <i>n</i> = 40	11.6 (18.8) <i>n</i> = 47	19.1 (64.0) <i>n</i> = 35	14.6 (34.5) <i>n</i> = 56	28.1 (41.6) <i>n</i> = 14
Number of Mid Level Management***	0.8 (0.8) <i>n</i> = 11	1.3 (1.5) <i>n</i> = 35	1.8 (1.7) <i>n</i> = 37	1.9 (1.8) <i>n</i> = 31	2.9 (1.8) <i>n</i> = 43	2.4 (1.8) <i>n</i> = 16
Number of Supervisors*	1.3 (1.9) <i>n</i> = 6	1.0 (1.0) <i>n</i> = 33	1.5 (1.5) <i>n</i> = 31	1.8 (2.3) <i>n</i> = 26	2.8 (4.1) <i>n</i> = 46	2.9 (2.2) <i>n</i> = 16
Number of Support Staff***	1.2 (0.7) <i>n</i> = 15	1.9 (1.5) <i>n</i> = 45	2.2 (2.8) <i>n</i> = 46	3.1 (2.8) <i>n</i> = 36	4.8 (6.3) <i>n</i> = 56	5.8 (4.2) <i>n</i> = 17

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

of revenue sources while 77% of CILs aged 25 years and older sought all types of revenue. Close to 100% of CILs age 25 years and older received all types of revenue sources.

In conclusion, in the first 10 years, CILs start with governmental funding, and then add Fee for Services for additional funding through a forming stage of 15 years. After increasing the amount of funding, CILs' Total Revenue stays the same for the next 10 years, while the number of revenue sources increased and diversified. This may be called a norming stage. CILs aged 25 years and over tap most revenue sources with the maximum Total Revenue of \$1.0 million on average. This period may be called a fulfilling stage.

4.4. Organizational structure and staffing

Table 3 summarizes the Number of Departments in means and standard deviations and Number of Staff (Full-Time, Part-Time, Volunteer, Mid-Level Management, Supervisors, and Support Staff) in frequencies and percentages. The pattern of increase in the Number of Full-Time Staff is parallel to that of Total Revenue. During the first 15 years, the numbers of Full-Time Staff increase (5, 6 and 9, respectively) and the next 10 years are the same (17 and 18) with the last period showing the largest increase (24). The number of Part-Time staff and the number of Mid-Level Management show an overall increase until the CIL is 20-25 years

old. After that, they decline. In CILs over 25 years of age, with increased funding, Part-Time staff may move to Full-Time. The steady increase was seen throughout six categories in Number of Support Staff. Although it dips in CILs aged 20–25 years, the Number of Volunteers begins with 4 people and increases to 28 people after 25 years. Statistically, Numbers of Departments, Full-Time Staff, Mid-Level Management, and Support Staff were significant at $p < 0.001$. Numbers of

Part-Time Staff and Supervisors were significant at $p < 0.05$, but Number of Volunteers were not, mainly due to large standard deviations.

Table 4 summarizes the Number of Staff, FTE and the Maximum Salary Range of five categories: administration (ADMN), community relations (CR), direct service (DS), indirect service (IDS) and physical plant (PP), in frequencies and percentages. The number and FTE of administration staff show constant increases (both F-values were significant at $p < 0.001$). Using FTE, the number of administrative staff increases 2 to 11 across six year categories. The same pattern is found for FTE in Direct Services starting with 2 and ending with 54 (the F-value was not significant due to a large standard deviation). Number of Physical Plant, FTE of Community Relations, Physical Plant, and Indirect Services were statistically significant at $p < 0.05$.

Table 5 shows the maximum range of salary (not included in Fig. 1). In contrast to financial status, of five job categories, none shows the maximum salary

Table 4
Number and FTE of Staffing

	< 5 Years Mean (SD)	5–10 Years Mean (SD)	10–15 Years Mean (SD)	15–20 Years Mean (SD)	20–25 Years Mean (SD)	> 25 Years Mean (SD)
ADMN*** (Number)	3.1 (1.7) <i>n</i> = 20	3.9 (2.4) <i>n</i> = 49	4.9 (3.6) <i>n</i> = 53	8.3 (7.2) <i>n</i> = 40	10.8 (16.0) <i>n</i> = 56	12.3 (7.8) <i>n</i> = 16
CR (Number)	0.6 (0.7) <i>n</i> = 20	0.7 (1.3) <i>n</i> = 49	1.8 (3.1) <i>n</i> = 52	2.1 (3.5) <i>n</i> = 39	2.1 (3.9) <i>n</i> = 54	2.0 (2.3) <i>n</i> = 16
PP* (Number)	0.1 (0.2) <i>n</i> = 20	0.2 (0.4) <i>n</i> = 49	0.2 (0.7) <i>n</i> = 53	0.6 (1.1) <i>n</i> = 41	0.4 (0.7) <i>n</i> = 58	0.4 (0.5) <i>n</i> = 17
DS (Number)	4.4 (4.0) <i>n</i> = 20	5.2 (3.4) <i>n</i> = 48	20.6 (107.3) <i>n</i> = 52	49.2 (216.4) <i>n</i> = 40	38.5 (104.0) <i>n</i> = 55	52.6 (155.6) <i>n</i> = 15
IDS (Number)	0.2 (0.4) <i>n</i> = 20	0.2 (0.5) <i>n</i> = 49	0.4 (1.3) <i>n</i> = 53	1.9 (8.3) <i>n</i> = 41	0.8 (1.7) <i>n</i> = 59	0.4 (0.7) <i>n</i> = 17
ADMN*** (FTE)	2.4 (1.5) <i>n</i> = 15	3.5 (2.1) <i>n</i> = 48	4.3 (3.1) <i>n</i> = 47	7.0 (4.7) <i>n</i> = 35	9.8 (16.4) <i>n</i> = 52	10.9 (7.1) <i>n</i> = 15
CR* (FTE)	0.4 (0.6) <i>n</i> = 18	0.4 (0.9) <i>n</i> = 47	1.1 (1.4) <i>n</i> = 49	1.7 (3.4) <i>n</i> = 36	1.7 (3.4) <i>n</i> = 51	1.8 (2.2) <i>n</i> = 16
PP* (FTE)	0.0 (0.1) <i>n</i> = 20	0.1 (0.3) <i>n</i> = 49	0.1 (0.2) <i>n</i> = 51	0.4 (1.1) <i>n</i> = 38	0.2 (0.5) <i>n</i> = 57	0.3 (0.4) <i>n</i> = 17
DS (FTE)	2.3 (1.8) <i>n</i> = 19	3.8 (2.7) <i>n</i> = 46	12.5 (58.0) <i>n</i> = 50	12.7 (25.7) <i>n</i> = 36	20.7 (75.2) <i>n</i> = 44	53.8 (161.1) <i>n</i> = 14
IDS* (FTE)	0.1 (0.2) <i>n</i> = 18	0.1 (0.2) <i>n</i> = 47	0.2 (0.6) <i>n</i> = 52	0.8 (2.4) <i>n</i> = 39	0.4 (0.9) <i>n</i> = 56	0.4 (0.6) <i>n</i> = 17

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 5
Maximum Salaries in Thousands of Dollars

	< 5 Years	5–10 Years	10–15 Years	15–20 Years	20–25 Years	> 25 Years
ADMN	46–50 <i>n</i> = 19	51–55 <i>n</i> = 49	61–65 <i>n</i> = 53	66–70 <i>n</i> = 40	91–95 <i>n</i> = 59	71–75 <i>n</i> = 18
CR	26–30 <i>n</i> = 8	26–30 <i>n</i> = 14	31–35 <i>n</i> = 34	46–50 <i>n</i> = 25	36–40 <i>n</i> = 40	41–45 <i>n</i> = 13
PP	<20 <i>n</i> = 1	20–25 <i>n</i> = 7	<20 <i>n</i> = 7	41–45 <i>n</i> = 12	41–45 <i>n</i> = 18	36–40 <i>n</i> = 6
DS	31–35 <i>n</i> = 15	31–35 <i>n</i> = 46	31–35 <i>n</i> = 50	51–55 <i>n</i> = 39	36–40 <i>n</i> = 59	41–45 <i>n</i> = 18
IDS	20–25 <i>n</i> = 2	20–25 <i>n</i> = 7	26–30 <i>n</i> = 11	41–45 <i>n</i> = 12	46–50 <i>n</i> = 21	36–40 <i>n</i> = 6

range among CILs over 25 years old. After 25 years, it is possible that employees who started working in the beginning stage of the CIL's life cycle, may retire. The maximum salary range in Administration and Indirect Services is within CILs that are 20–25 years old; that in Community Relations and Direct Services is found among CILs that are 15–20 years old. The maximum salary range of Physical Plant is in CILs that are 15–20 years old and 20–25 years old.

4.5. Services and programs

Table 6 presents the number of programs and services offered in means and standard deviations and 23 programs in frequencies and percentages. The youngest CILs offered eight programs on average. During the next 10 years, the number of programs declined, and in CILs over 25 years old, it reached 10 programs. CILs that are less than five years old offer the highest percentage in seven of 23 programs: Case Management

Table 6
Program Information

	< 5 Years	5–10 Years	10–15 Years	15–20 Years	20–25 Years	> 25 Years
Sample size	<i>n</i> = 20	<i>n</i> = 50	<i>n</i> = 54	<i>n</i> = 42	<i>n</i> = 62	<i>n</i> = 19
Number of Programs*	8.0 (3.5)	7.3 (3.8)	6.7 (3.1)	7.9 (3.9)	8.4 (3.6)	9.7 (3.3)
Community education (disability awareness)	19 (95.0%)	46 (92.0%)	49 (90.7%)	40 (95.2%)	61 (98.4%)	19 (100.0%)
Transitional services for youth	7 (35.0%)	21 (42.0%)	32 (59.3%)	23 (54.8%)	31 (50.0%)	12 (63.2%)
Family support services	12 (60.0%)	20 (40.0%)	18 (33.3%)	19 (45.2%)	33 (53.2%)	13 (68.4%)
Case management	12 (60.0%)	29 (58.0%)	22 (40.7%)	17 (40.5%)	34 (54.8%)	11 (57.9%)
Rehabilitation	5 (25.0%)	9 (18.0%)	6 (11.1%)	2 (4.8%)	14 (22.6%)	3 (15.8%)
Counseling						
Consumer directed personal assistance services	11 (55.0%)	27 (54.0%)	26 (48.1%)	30 (71.4%)	37 (59.7%)	12 (63.2%)
In home health care**	6 (30.0%)	2 (4.0%)	2 (3.7%)	3 (7.1%)	6 (9.7%)	5 (26.3%)
Mental health programs	4 (20.0%)	16 (32.0%)	10 (18.5%)	12 (28.6%)	17 (27.4%)	10 (52.6%)
Peer run support	3 (15.0%)	17 (34.0%)	11 (20.4%)	10 (23.8%)	18 (29.0%)	10 (52.6%)
Outpatient treatment	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.4%)	3 (4.8%)	1 (5.3%)
Club house or social club	1 (5.0%)	2 (4.0%)	2 (3.7%)	3 (7.1%)	7 (11.3%)	2 (10.5%)
Business enterprise**	1 (5.0%)	7 (14.0%)	9 (16.7%)	8 (19.0%)	24 (38.7%)	7 (36.8%)
Assistive technology training	17 (85.0%)	30 (60.0%)	28 (51.9%)	20 (47.6%)	39 (62.9%)	12 (63.2%)
Rehabilitation teaching for the blind	5 (25.0%)	10 (20.0%)	5 (9.3%)	5 (11.9%)	11 (17.7%)	2 (10.5%)
Mobility training for blind/low vision	4 (20.0%)	7 (14.0%)	8 (14.8%)	4 (9.5%)	15 (24.2%)	3 (15.8%)
Braille*	4 (20.0%)	15 (30.0%)	10 (18.5%)	16 (38.1%)	28 (45.2%)	6 (31.6%)
Audio Recording	5 (25.0%)	10 (20.0%)	11 (20.4%)	10 (23.8%)	17 (27.4%)	4 (21.1%)
Sign language interpreting**	4 (20.0%)	14 (28.0%)	12 (22.2%)	24 (57.1%)	27 (43.5%)	11 (57.9%)
Transportation service	8 (40.0%)	13 (26.0%)	16 (29.6%)	18 (42.9%)	21 (33.9%)	5 (26.3%)
Employment assistance*	10 (50.0%)	23 (46.0%)	27 (50.0%)	23 (54.8%)	32 (51.6%)	17 (89.5%)
Respite Care	0 (0.0%)	2 (4.0%)	1 (1.9%)	4 (9.5%)	6 (9.7%)	3 (15.8%)
Programs for Elderly with Disabilities	9 (45.0%)	12 (24.0%)	14 (25.9%)	17 (40.5%)	20 (32.3%)	6 (31.6%)
Literacy	6 (30.0%)	9 (18.0%)	9 (16.7%)	7 (16.7%)	5 (8.1%)	2 (10.5%)

p* < 0.05; *p* < 0.01; ****p* < 0.001.

(60.0%), Rehabilitation Counseling (25.0%), In-Home Health Care (30.0%), Assistive Technology Training (85.5%), Rehabilitation Teaching of the Blind (25.0%), Assistance for Elderly with Disabilities (45.0%), and Literacy (30.0%). Eight programs showed the same percentage or an increase across all six periods: Community Education, Transitional Services for Youth, Personal Assistance Services, Mental Health Programs, Peer Run Support, Business Enterprise, Employment Assistance and Respite Care. Almost all others showed a decline in percentages.

4.6. Number of consumers

Regarding consumers, the mean numbers are as follows: in CILs that are less than 5 years old, 468; 5–10 years old, 479; 10–15 years old, 771; 15–20 years old, 965; 20–25 years old, 918; and over 25 years old, 1905. The growth pattern is similar to that of Number of Departments. The F-value was significant at *p* < 0.001.

5. Summary

Figure 2 summarizes the growth of CILs' major managerial elements in z-scores in five-year increments by

connecting means for six periods. CILs start with limited numbers of funding sources (often only government funding) and offer enthusiastic numbers of programs. However, they soon realize that some programs may have to be consolidated, reducing the number of supervisory positions and increasing the number of service delivery staff for better services. In the first 15 years, the numbers of programs decrease, while CILs add Fee for Services as additional sources of funding. At the same time, CILs are not increasing the number of employees dramatically. As the total revenue increases, the number of full-time staff increases along with the number of departments. In CILs aged 15–25, a balance appears to be found, with growth tapering off, indicated by flat lines of total revenue, the number of full time staff, the number of departments, the number of programs, and even the number of consumers. CILs are not inactive during this period. They are looking for additional revenue sources. The trend of the number of revenue sources is always ahead of the total amount of revenue by one period (five years). Therefore, after 25 years of existence, CILs have the highest amount of revenue, resulting in high numbers of staff, departments and programs. However, since a maximum number of resource types are being tapped (all four types),

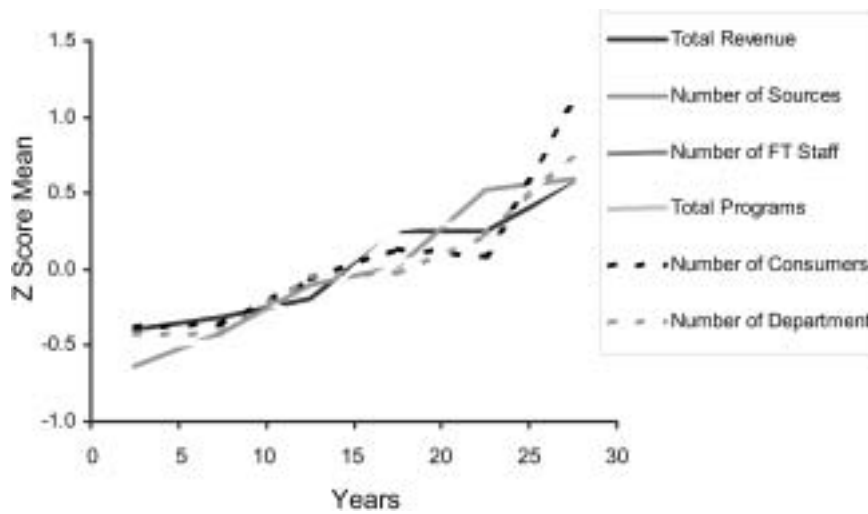


Fig. 2. Mean changes among major variables.

it is not likely that total revenue will increase further. As CILs age, they become an increasingly vital part of their communities. As CILs become more visible, consumer numbers increase. This period is as important as other periods for CILs' future existence, because CILs' veterans may be retiring and most revenue types were tapped. With the aging population, the number of consumers may increase. New funding sources will be needed to serve those consumers and may be key to survival.

6. Conclusion and discussion

The National Centers for Independent Living (CIL) Management Database consisted of survey data from 255 main centers for independent living. CILs are non-profit organizations that seek financial stability in order to offer a variety of services to their consumers. CILs employed over 4,800 people offering services and programs to more than 188,000 people with disabilities. Total revenue was over \$218.5 million; but not distributed evenly among all CILs. Younger CILs (less than 5 years old) typically had revenue of a little over \$240,000 from 4.5 governmental funding sources and centers that were 25 years old had over \$2 million with 8 different funding sources. Based on our analyses, we recognize a pattern in the lifecycles of CILs. Using Land and Jarman's terms, we called the period from start up to the first 15 years of age a forming phase. It is characterized by decreasing numbers of programs that were too many for this financial stage while gradually increasing the amount of revenue and the number of

revenue sources, employees and volunteers. The number of departments and consumers were similar for the first 10 years, but during the period of 10–15 years, they increased greatly. This may be the result of program consolidation efforts to better define departments and provide more specialized services.

The next 10 years (a period of 15 to 25 years) may be a norming phase. Land and Jarman explain that a norming phase is a progressive phase. For CILs, this period may be a growth stage, balancing funding and services while identifying more revenue sources. The final stage (over 25 years), is the fulfilling phase. It is a tapered phase. Analyses of the number of revenue sources indicates that it reached the maximized phase, although other elements are still showing growth. Although each of these three phases of organizational development appears to fit the three phases of CILs' lifecycles, it does not reveal a typical S curve of organizational life. When the number of resources increase, the rest of the managerial elements, such as the amount of revenue, the number of staff, departments and numbers of consumers, also increases in the next five years. When the number of resources tapers off, the rest of the elements follow the pattern in the next five years. Therefore, the number of resources appear to prescribe the rest of the organizational behaviors. When this pattern is recognized, it is likely that CILs 30 years and older slow their growth, showing an S curve. Therefore, it is crucial for CILs over 25 years to cultivate new funding sources. Increased numbers of consumers are the result of successful management that may not necessarily secure more funding, but may be a driving force for more funding. Since CILs that are older

than 25 years reached the maximum number of types of funding sources (tapped all four types), CILs may be required to seek newer and varied funding sources and Fees for Services. CILs may explore their list of services to discover new or varied financial sources for CILs.

One shortcoming of the analysis is that we used cross-sectional data to estimate the course of a CIL's lifecycle. A cohort effect should be recognized. The analysis presented here should be interpreted as the current status of various CILs. It does not necessarily predict what will happen to new CILs as they grow or what was likely for older CILs when they were younger. For example, programs such as Assistive Technology Training, Rehabilitation Teaching for the Blind, Programs for Elderly with Disabilities, and In-home Health Care are more commonly offered services now than 20 years ago. Time, rather than age, is affecting services offered. If we can take those cohort effects from the analyses, we can present a better picture of CILs' development. This is beyond the scope of this article. We

arbitrarily used a five-year increment. If we used a continuous scale for the x-axis or used a different interval, a more precise picture may have emerged. It is strongly encouraged that a model of a CIL's management lifecycle be developed and compared with that of other non-profit human service organizations. The oldest CIL is 31 years old. Centers for independent living comprise a young industry. Despite our analyses, CILs may still be in a forming phase attempting to find comfortable growth. Continuing to track CILs' developments will lead to better understanding of this industry.

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