Aphasia Centers and the Life Participation Approach to Aphasia

A Paradigm Shift

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The Aphasia Center is a service delivery model that provides an interactive community for persons with aphasia. This model has been increasing in popularity over the last 20 years. Aphasia Centers are consistent with a social model of health care and disability. They offer the potential for linguistic, communicative, and psychosocial benefits. The purpose of this article is to describe the historical context that served as the catalyst for Aphasia Centers as well as to offer a firsthand account of their development. Included is a summary of the research evidence, as well as other factors that support the science underlying aphasia group treatment, Aphasia Centers, and the Life Participation Approach to Aphasia. Finally, examples are provided that show how this service delivery model is being incorporated into clinical guidelines, clinical pathways, and clinical best practices. **Key words:** aphasia, aphasia center, aphasia group, aphasia group therapy, aphasia group treatment, aphasia therapy, aphasia treatment, life participation, paradigm shift, social model

THE APHASIA CENTER, a service delivery model that provides an interactive community for persons with aphasia, is currently enjoying a renaissance worldwide. The purpose of this article is to describe the historical context that served as the impetus for the development of Aphasia Centers. At times, I will add a first-person account of the paradigm shift, as a professional who has lived through and worked to promote this change. Included in the literature review is research evidence that supports the science underlying aphasia group treatment, Aphasia Centers, and

the Life Participation Approach to Aphasia (LPAA). Finally, examples are provided that show how this service delivery model is being infused into clinical guidelines, clinical pathways, and best practices.

At first glance, the blossoming of Aphasia Centers may appear to be a relatively new phenomenon, but these programs actually result from the interface of a number of historical factors. These include a transition from a medical to a social model of health care and disability; the adoption of a new framework, the International Classification of Functioning, Disability, and Health (ICF), by the World Health Organization (WHO, 2001); growing evidence for the effectiveness and efficacy of aphasia group treatment; publication of LPAA (LPAA Project Group, 2000, 2008) along with subsequent publications and presentations; and the emergence of alternative service delivery options outside of traditional health care, given the reduction in authorized treatment of aphasia intervention (Elman & Bernstein-Ellis, 1995). In retrospect, it is impossible to say which one of these factors was more or

Author Affiliation: Aphasia Center of California, Oakland

The author receives salary from the Aphasia Center of California and book royalties from the Plural Publishing. Both grant/payment are current. The author is a past board member of AphasiaAccess.

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DOI: 10.1097/TLD.00000000000000087

less important for the emergence of Aphasia Centers. What we can say is that these factors helped create a "contextual brew," producing an environment that served as a catalyst for the emergence of the first Aphasia Centers. And once the first Aphasia Centers emerged, others followed.

MODELS OF HEALTH CARE AND DISABILITY

The traditional model in Western health care has been termed a medical model. In this model, illness and disability are considered to be located within the patient. A health care expert provides treatment, with the desired outcome being a cure for the illness or disorder. In contrast to this medical model, a social model of health care has evolved. Within this paradigm, illness and disability are considered to be an interaction among personal, physical, environmental, and societal factors. Rather than an expert providing all of the treatment, care based on social models is collaborative. The individual with the disease or disorder works alongside professionals throughout intervention. The desired outcome within a social model is to promote positive change even when cure is not possible. This is especially appropriate for conditions such as aphasia, in which the condition is often chronic.

In the 1970s, the social model was applied to disability, adding momentum to the worldwide disability rights movement that was empowering persons with a disability to take charge and be in a position to make choices about their own care and lives (Cruice, 2007; Oliver, 1983, 1996; Parr, 1994, 2001; Pound, Duchan, Penman, Hewitt, & Parr, 2007; Pound, Parr, Lindsay, & Woolf, 2000). At the same time, the independent living movement was confronting medicalization and professionalization in the rehabilitation system (Gillman, Swain, & Heyman, 1997; Zola, 1979). The independent living movement worked on removing a number of barriers for persons with disability, including social attitudes, architectural barriers, legal barriers, and educational barriers (Bowe, 1978). As an outcome, the first independent living center was created in Berkeley, CA, in the early 1970s, serving as a model for the development of other centers across the country.

In 2001, WHO created a multipurpose health classification system termed the "International Classification of Functioning, Disability, and Health," which served to integrate medical and social models. This classification system offered health care professionals a framework for describing human functioning and disability (Reed et al., 2005). In 2001, the ICF was used as the framework for the American scope of practice document in speech-language pathology (American Speech-Language-Hearing Association, 2001). The ICF's integration of biological, individual, and social perspectives is consistent with both the philosophy and potential environment essential to Aphasia Centers.

APHASIA GROUP TREATMENT

Aphasia group treatment began in the 1940s as a practical response to treating the many soldiers who returned from World War II with brain injuries (Sheehan, 1946). Without sufficient speech-language pathology staff at hospitals to provide individual treatment, soldiers were grouped together. Although this group therapy was initially conceived to meet staffing shortages, the potential benefits of group treatment were recognized and anecdotal reports and group treatment descriptions emerged for people with aphasia as well as family members (Bloom, 1962; Holland, 1991; Kearns & Simmons, 1985; Sheehan, 1946; Taylor & Myers, 1952).

The brief, selective review of the literature provided later focuses on research studies that have investigated the effectiveness and efficacy of communication group treatment using authentic conversational topics and tasks (Simmons-Mackie & Damico, 1996; Simmons-Mackie, Savage, & Worrall, 2014). For additional information about other types of aphasia group treatment, the reader is directed to several group treatment texts (Avent, 1997; Elman, 2007a; Marshall, 1999), a book

chapter (Kearns & Elman, 2008), and a systematic review (Lanyon, Rose, & Worrall, 2013).

Research evidence regarding the effectiveness and efficacy of aphasia group treatment was first available in the early 1980s when researchers conducting a Veterans Administration study randomly assigned participants with acute aphasia to either individual speech-language treatment or aphasia group treatment (Wertz et al., 1981). The results of this study indicated that 8 hours per week of individual speech-language therapy resulted in similar outcomes to 8 hours per week of conversation group therapy on the dependent measures. The authors concluded,

Our results indicate that individual treatment may be slightly superior to group treatment. However, the improvement displayed by our group-treated patients and the cost-effective advantages of group therapy should prompt speech-language pathologists to consider it for at least part of an aphasia patient's care. (p. 592)

A study by Aten, Caliguri, and Holland (1982) provided additional support for the effectiveness of communication group treatment. The investigators provided "functional communication treatment" to seven individuals with chronic nonfluent aphasia who had not made recent gains in therapy as measured by the Porch Index of Communicative Abilities (PICA; Porch, 1967). These participants received aphasia group treatment for 2 hours per week for 12 weeks in simulated real-life situations. Results demonstrated statistically significant gains on the Communicative Abilities of Daily Living (CADL; Holland, 1980) following treatment.

Bollinger, Musson, and Holland (1993) used a treatment withdrawal design in a partial replication of the Aten et al (1982) study. Ten participants received 3 hours per week of contemporary group treatment and structured television group treatment, each followed by a no-treatment period, over a 40-week period. Results revealed statistically significant improvement on both the CADL and the PICA.

Elman and Bernstein-Ellis (1999a) provided evidence for the efficacy of group communication treatment in their multimethod, ran-

domized controlled trial for participants with chronic aphasia. Participants were randomly assigned to either immediate or deferred communication treatment conditions, allowing the investigators to study the impact of "social contact" while still controlling for time. Twenty-four participants received 5 hours of aphasia communication treatment per week for 4 months. Results indicated that group communication treatment was efficacious. Participants who received group communication treatment demonstrated significant changes on dependent measures of both communicative and linguistic outcomes, whereas those enrolled in the social groups did not. Significant change on dependent measures occurred after 2 months of treatment and after 4 months of treatment. In addition, treatment gains did not decline significantly at follow-up testing that was conducted 6 weeks later.

As part of the same study, Elman and Bernstein-Ellis (1999b) reported on the qualitative analysis of semistructured interviews for 12 participants and their family members, following 2 and 4 months of communication group treatment. The themes identified were highly consistent across participants and revealed changes in both communication skills and psychosocial adjustment. Positive aspects of communication group treatment that were identified by the participants with aphasia included being more confident; enjoying the support of others with aphasia; enjoying making friends; enjoying helping others; liking seeing others improve; enjoying participating in conversations; and talking more. Similar themes emerged from the family member interviews about their significant other with aphasia. These included: being more confident, more social, more independent, more motivated, having made new friends, happier, able to help others, and with improved speech and language skills.

Ross, Winslow, Marchant, and Brumfitt (2006) provided additional support for the effectiveness of group communication treatment. Seven individuals with chronic moderate aphasia received 2 hours of group "total communication" treatment per week

for 11 weeks. In addition to two speech-language pathologists, a disability equality trainer contributed to the planning and activities of this group. This study used a pre-, post-, and 3-month follow-up treatment design. Results indicated some evidence of significant change in conversation experiences, but because of the small sample size and participant variability, these results need to be evaluated with caution.

Simmons-Mackie, Elman, Holland, and Damico (2007) provided one of the first studies to analyze group treatment management behaviors and skills. They conducted a qualitative analysis of the discourse of clients and therapists from aphasia group treatment sessions to identify patterns across therapists and settings. Six group communication therapy sessions involving individuals with aphasia were videotaped and analyzed. Results identified "well-managed" and "poorly managed" aphasia groups. Within the wellmanaged aphasia group therapy sessions studied, therapists utilized a variety of behaviors and techniques, some implicit and some explicit, that included the following discourse management features: establishing the feel of discourse equality, focusing on everyday communicative events and genres, employing multiple communication modes, mediating communication, calibrating corrections, aiding turn allocation, and employing teachable moments.

A subsequent study by Simmons-Mackie and Elman (2011) provided an analysis of the content of aphasia communication group treatment. This sociolinguistic analysis of group therapy for aphasia investigated how positive personal and group identity was negotiated. A group conversation therapy session was analyzed to identify "indices of identity" within the discourse and also "patterns of discourse" associated with identity. The findings included several categories associated with the negotiation of identity in group treatment including the following: discourse demonstrating that group members were "being heard"; the competence of group members was assumed; "solidarity" existed in the

group; saving face and promoting positive personal identity were important; and markers of group identity were made visible via discourse that referenced both member inclusion and nonmember exclusion. This study provided evidence for the potential role of the group facilitator in managing identity negotiation in group aphasia therapy (Brumfitt, 1993; Shadden, 2007; Shadden & Hagstrom, 2007).

LIFE PARTICIPATION APPROACH TO APHASIA

The paradigm shift in aphasiology was strengthened when speech-language pathologists began emphasizing the everyday lives of people with aphasia as a starting point for aphasia assessment and treatment. There was recognition that intervention approaches were needed that could prepare these individuals for the communication needs of community life (Elman, 2001, 2007b; Kagan & Simmons-Mackie, 2007; Kagan & LeBlanc, 2002; LaPointe, 2011; Pound et al., 2000; Simmons-Mackie, King, & Beukelman, 2013) while being informed by their life goals (Byng & Duchan, 2005; Duchan & Black, 2001; Lyon, 1992, 1996, 1997, 2000; Rosenberg & Beukelman, 1987). These interventions were directly related to the social model of disability and the independent living movement that had begun in the 1970s.

In the 1990s, a group of speech-language pathologists (Roberta Chapey, Judith Duchan, Roberta Elman, Linda Garcia, Aura Kagan, Jon Lyon, and Nina Simmons-Mackie) provided a further catalyst for creation of innovative aphasia treatments including Aphasia Centers. These professionals were interested in spurring on new approaches and methods that would address life participation and quality of life for persons with aphasia. What started as a series of informal meetings and discussions, resulted in a position paper about aphasia intervention called the "Life Participation Approach to Aphasia" (LPAA Project Group, 2000, 2008). In the 2000 paper, the authors stated the following:

Our statement of values has been guided by the ideas and work of speech-language pathologists as well as by individuals in psychology, sociology, and medicine. We intend neither to prescribe exact methods for achieving specific outcomes, nor to provide a quick fix to the challenges facing our profession. Rather, we offer a statement of values and ideas relevant to assessment, intervention, policy making, advocacy, and research that we hope will stimulate discussion related to restructuring of services and lead to innovative clinical methods for supporting those affected by aphasia. (p. 279)

Within LPAA, aphasia assessment and treatments can focus on one or more ICF domains, including factors related to the communicative environment, life situation, personal identity, attitudes, and feelings, as well as the language impairment. Intervention is consistent with LPAA as long as the following five core values are met: The explicit treatment goal is enhancement of life participation; all those affected by aphasia are entitled to service; the measures of success include documented life enhancement changes; both personal and environmental factors are targets of intervention; and emphasis is on the availability of services at all stages of living with aphasia (LPAA Project Group, 2000). It is important to understand that LPAA does not define a particular method of conducting aphasia assessment or treatment. Rather, all interventions that are consistent with LPAA general principles and core values are considered to be LPAA.

ADDITIONAL FACTORS THAT SUPPORTED THE CREATION OF APHASIA CENTERS

Although the social model, evidence for aphasia group treatment, and LPAA were significant forces in the development of Aphasia Centers, other factors also played an important role in their interest and growth. One powerful external force was the decrease in health care reimbursement for aphasia treatment available in traditional health care settings (Elman, 1998, 1999; Elman & Bernstein-Ellis, 1995; Simmons-Mackie, 2008). In the 1990s, insurance-authorized duration

of treatment began a steep decline, from many months or years to just days or weeks (Elman & Bernstein-Ellis, 1995). This was a reality that required a creative solution. Emergence of aphasia centers, which had funding streams outside of traditional insurance reimbursement, gained notice and traction (Elman, 1998, 1999).

Other factors that fueled the paradigm shift included recognition of the need for interventions that improved quality of life and overall well-being for people with aphasia (Brown, Worrall, Davidson, & Howe, 2012; Hilari, Needle, & Harrison, 2012; Holland & Nelson, 2013; LeDorze & Brassard, 1995; Parr, Byng, Gilpin, & Ireland, 1997; Sarno, 1991, 1993; Ross & Wertz, 2003) and reduced the negative impact of social isolation that often resulted from aphasia (Attard, Lanyon, Togher, & Rose, 2015; Davidson, Howe, Worrall, Hickson, & Togher, 2008; Elman, 2007b; Elman & Bernstein-Ellis, 1999b; Hilari & Northcott, 2006; Rotherham, Howe, & Tillard, 2015; Ryff, 1989; Ryff & Singer, 2000; Ryff, Singer, & Love, 2004; Vickers, 2010; Worrall et al., 2011). There was also increasing recognition that people with aphasia could receive benefit from opportunities for authentic conversation and development of social relationships that were typical in dyads and groups (Elman, 2007a, 2007b; Ewing, 2007; Simmons-Mackie & Elman, 2011; Simmons-Mackie et al., 2014; Yalom, 2005).

APHASIA CENTERS

In 1979, Pat Arato founded what would become the first independent, community-based Aphasia Center. Located in Toronto, Canada, and now called the Aphasia Institute, Arato desired ongoing services for her husband, whose stroke had left him with aphasia, after insurance coverage had ended. Inspired by actor and stroke survivor Patricia Neal, Arato and three other volunteers worked with a group of seven adults to reduce language barriers and enable communication. Today, the Aphasia Institute serves as a local, provincial,

national, and international resource for those affected by or working with aphasia.

The Aphasia Center of California (ACC) was the first independent, community-based Aphasia Center created in the United States. In the 1990s, many Californians were seeing a decline in insurance coverage for a variety of disorders, including aphasia (Elman & Bernstein-Ellis, 1995). Inspired by a visit to Toronto's Aphasia Institute, we received funding for the previously described randomized controlled treatment trial of aphasia communication group treatment. Results demonstrated the language, communication, and psychosocial benefits for study participants (Elman & Bernstein-Ellis, 1999a, 1999b). On the basis of these study results, as well as the potential for improving overall quality of life for center participants, the ACC incorporated as a nonprofit, charitable 501(c)(3) organization and opened its doors in 1996. The ACC's research, professional presentations, and service delivery model have served as a model for other Aphasia Centers and programs.

As this is being written, there are currently 12 active, independent Aphasia Centers recognized by the federal government as 501(c)(3) charitable organizations in the United States (Guidestar, 2016). In addition to these independent Aphasia Centers, there are numerous Aphasia Centers and aphasia programs that are affiliated with health care organizations and universities. I have watched this number grow dramatically over the last 20 years, with new Aphasia Centers or aphasia programs starting each year.

WHAT IS AN APHASIA CENTER?

Simmons-Mackie and Holland (2011) published the first survey about Aphasia Centers in North America. To determine appropriate survey respondents, they included the following description or definition of an Aphasia Center:

Aphasia Centers provide programming designed exclusively for people with aphasia and, in some cases, for their family members. These dedicated aphasia programs are distinct from stroke rehabili-

tation or general rehabilitation programs, and typically offer services such as conversation groups, leisure activities, or similar participation oriented activities. (p. 204)

The responses to the surveys described 26 unique programs, 19 of which had started since 2000. In addition to independent Aphasia Centers, programs affiliated with hospitals and universities responded and were included. The authors provide descriptive statistics for their 37-item survey. Twenty-four of the Aphasia Centers had written mission statements, with 10 or more of the centers including the following themes in these statements: rebuilding lives and increasing life engagement of participation; improving communication; and assisting families. The majority of programs did not utilize discharge criteria, and most used client satisfaction measures as their primary outcome measure.

Aphasia Centers varied with regard to the number of program hours provided, with most centers reporting between 1 and 6 hours of program participation per person per week. The majority of centers employed one or more speech-language pathologists on a full- or part-time basis. Some centers reported employment of social workers, psychologists, recreation and exercise coordinators, music therapists, physical therapists, occupational therapists, and physicians. More than half of the centers reported using volunteers in some aspect of their programming. The majority of centers were funded via fee for service or selfpay in addition to charitable donations, grants, and fund-raising projects.

The most common program offered at Aphasia Centers was conversation groups—All but one center reported offering this type of group. More than half of the centers offered computer or Internet activities, outings, individual speech-language therapy, writing, programs, book clubs, games, reading groups, life skills activities, and educational programs. Some centers provided counseling or advocacy groups, exercise, art, theater, and drama groups. The majority of centers reported offering some type of caregiver support groups.

Many programs offered various services or training in the community including aphasia awareness programs, supported conversation training, and clinical practicum experiences for speech-language pathology students.

In addition to descriptive statistics, Simmons-Mackie and Holland (2011) conducted a qualitative analysis of the survey text responses in an attempt to capture an "Aphasia Center ethos." The authors state that, overall, there was an enthusiastic and positive tone from respondents that supported the general concept and function of Aphasia Centers. The authors identified six themes that are important, providing a working definition of an "Aphasia Center":

- A focus on broad quality-of-life issues with a holistic approach to management of aphasia.
- Group interaction as the key.
- Providing a community where members shared common goals and participated with others living with aphasia.
- The potential for improvement in psychosocial well-being.
- The potential for members to have both more hours and more varied programming.
- A focus on participation and social engagement via programming that fostered involvement in activities typical of "daily life."

EFFECTIVENESS OF APHASIA CENTERS

Two research reports have been published regarding the effectiveness of community-based centers (Hoen, Thelander, & Worsley, 1997; Van der Gaag et al. 2005). These studies demonstrate the benefits of attending programs such as Aphasia Centers, but they do not reveal which aspects of these programs are critical or which provide the most benefit for the participants.

Hoen et al. (1997) investigated psychosocial changes after participation in a community-based program for individuals who had experienced stroke or head injury. Thirty-four individuals attended volunteer-run

communication groups twice weekly for halfday periods. In addition, 12 of the participants' family members participated in a social worker-facilitated support group. Improvement was measured on the Ryff Psychological Well-Being Scales (Ryff, 1989) over a 6-month period. Results revealed that participants with aphasia showed improvement on the following Ryff scales: autonomy, environmental mastery, personal growth, purpose in life, and selfacceptance. The scale designed to measure positive relations with others did not show significant change. Family members showed significant change on all of the Ryff scales except for environmental mastery. As the authors note, the research design did not permit objective assessment regarding the benefits of group intervention.

Van der Gaag et al. (2005) conducted a study of 28 people with chronic aphasia, as well as 14 significant others, to evaluate the impact of attending a community-based aphasia program on quality of life and communication skills. Individuals with aphasia attended group treatment either once or twice weekly for an average of 1.7 hours a week. Caregivers received an average of 1.4 hours of therapy a week. The focus of the group activities varied widely and included conversation, communication skills, and self-advocacy groups. Group selection and participation were participantdetermined. Both qualitative and quantitative methods were used to assess the participants before and after 6 months of therapy. Participants were evaluated by semistructured interviews and two quantitative measures assessing quality of life, the Communication Effectiveness Index (CETI; Lomas et al., 1989) and a caregiver assessment. Results revealed statistically significant improvement on the CETI and one of the two quality-of-life measures but no statistically significant change on the caregiver assessment. The qualitative interviews conducted with participants revealed similar results, with a majority of participants reporting improved communication skills.

In addition to the evidence about the benefits of attending Aphasia Centers, there are a growing number of published studies or reports regarding the instructional methods and potential benefits of hobby-based, skill-based, and recreational groups within an Aphasia Center. Table 1 provides the results of a literature review of the published articles containing instructional details of programs or groups offered at various Aphasia Centers.

In addition to these program-related studies and descriptions, there are publications that address starting and administering an Aphasia Center (Elman, 2011), applying LPAA principles into university programs (Glista & Pollens, 2007; Vickers & Hagge, 2014), measuring outcomes of life participation programs (Garrett & Pimentel, 2007; Kagan et al., 2011), and incorporating personalized goals into aphasia intervention (Haley, Womack, Helm-Estabrooks, Lovette, & Goff, 2013; Silverman, 2011). These publications indicate that Aphasia Centers are collecting outcome data on program components that are part of the overall treatment milieu. However, future research will need to unpack these program variables in a scientifically sound manner to provide information about which program elements are critical to linguistic, communicative, and psychosocial improvements for participants with aphasia.

The paradigm shift and influence of a life participation model for aphasia intervention are perhaps best illustrated by the creation of a new North American organization by clinicians and providers at Aphasia Centers and other life participation-oriented programs. AphasiaAccess is a not-for-profit alliance of health care, business, and community providers that is building a network to focus on improving communication access for people with aphasia (AphasiaAccess, 2015). AphasiaAccess service providers and researchers promote the following principles:

- Persons with aphasia should have access to services that not only improve language and communication but also help them participate in daily interactions and activities.
- Those who provide services to persons with aphasia must strive to create environments that people with aphasia can successfully navigate.
- Providers of treatment or services consistent with the LPAA deserve practical strategies, ongoing support, and a network of peers.

Table 1. Publications that describe hobby-based, skill-based, and recreational groups offered at Aphasia Centers

Aphasia Center Programs	Reference
Aphasia Choirs	Tamplin, Baker, Jones, Way, & Lee, 2013
Aphasia Book Clubs	Bernstein-Ellis & Elman, 2006, 2007; Elman & Bernstein-Ellis, 2006; Elman & Hoover, 2013
Community Outing Groups	Elman & Hoover, 2013
Community Training Programs	Welsh & Szabo, 2011
Computer and Technology	Elman, 2001; Elman & Hoover, 2013; Elman, Parr, & Moss,
Groups	2003; Golashesky, 2008; Holland, Weinberg, & Dittelman, 2012; McCall, 2012; Szabo & Dittelman, 2014
Drama Groups	Cherney, Oehring, Whipple, & Rubenstein, 2011
Horticulture Classes	Sarno & Chambers, 1997
Photography Classes	Levin et al., 2007
Self-Advocacy Groups	Coles & Eales, 1999; Nicholas, 2012; Penman & Pound, 2007 Pound et al., 2000

CLINICAL GUIDELINES, CLINICAL PATHWAYS, AND BEST PRACTICES

To optimize service delivery for persons with aphasia, a number of aphasia intervention guidelines, clinical pathways, and best practice documents have been developed that are consistent with LPAA (Elman, 2013; Power et al., 2015). One of the main goals of these documents is to provide structure so that appropriate evidence-based interventions are considered and provided as part of routine clinical care (Campbell, Hotchkiss, Bradshaw, & Porteous, 1998).

For example, the Canadian province of Ontario has developed a clinical handbook for stroke that includes specific evidence-based aphasia intervention procedures (Health Quality Ontario, 2015). These guidelines state that speech-language pathologists should consider individual, group, or conversation group treatment as appropriate for all people with aphasia. In addition, family education and partner training, specifically Supported Conversation for Adults with Aphasia (SCA; Kagan, 1998; Kagan, Black, Duchan, Simmons-Mackie, & Square, 2001), are recommended.

The Australian Aphasia Rehabilitation Pathway (AARP) is another set of clinical standards for aphasia management (Power et al., 2015). Its purpose is to help guide speech-language pathologists in providing person-centered, evidence-based aphasia services in order to optimize rehabilitation for people with aphasia, their family members, and friends. The Australian Aphasia Rehabilitation Pathway includes 82 best practice statements divided among eight core areas. These core areas include receiving the right referrals, optimizing initial contact, setting goals and measuring outcomes, assessment, providing intervention, enhancing the communicative environment, enhancing personal factors, and planning for transitions. The AARP clinical standards include intervention options consistent with LPAA, including provision of aphasia group treatment.

Similarly, C.A.P.E. is a mnemonic that stands in full for "Connecting People with

Aphasia, AAC, Partner Training, Education and Resources" (Elman, 2013), comprising four categories for aphasia intervention that can be abbreviated "Connecting, AAC, Partner training, and Education." These intervention categories, which constitute a best practice checklist for speech-language pathologists, can be described as follows:

- Connecting people with aphasia to one another via participation in community aphasia groups, Aphasia Centers, aphasia camps, and/or online connections.
- Augmentative and Alternative Communication (AAC) options provided to people with aphasia to enhance their ability to communicate with others in current environments. Low-tech AAC options are emphasized such as individualized communication books, number lines, communicative drawing, written choices, gestures, and so forth.
- Partner Training provided to family members, friends, health care professionals, community members, and so forth, to enhance communication with people with aphasia.
- Education and community resources regarding aphasia for people with aphasia, family members, friends, community members, and so forth. This information should be made "aphasia friendly" when created for people with aphasia (Rose, Worrall, Hickson, & Hoffmann, 2011).

The four C.A.P.E. intervention categories were derived from results of research studies with persons with aphasia and/or caregivers regarding desired aphasia intervention goals and content (Avent et al., 2005; Brown et al., 2012; Hinckley, Hasselkus, & Ganzfried, 2013; Worrall et al., 2011), as well as my personal experience at the ACC where we frequently encounter people with aphasia who, even years following their stroke, cannot communicate with family members or have never met others living with aphasia. The C.A.P.E. categories are not meant to be prescriptive or exhaustive. Instead, I suggest that these categories serve as a clinical checklist for speechlanguage pathologists to ensure that all items are addressed, especially during the first few months of intervention. I believe that if these categories are included early in intervention, that improved life participation and quality of life for persons with aphasia and family members are more likely to result.

CONCLUSION

The growth of Aphasia Centers and programs consistent with a social model of health care and disability are examples of a paradigm shift in aphasia intervention. Aphasia Centers provide people with aphasia with an

interactive environment with the potential for linguistic, communicative, and psychosocial benefits. These centers are supported by an increasing body of scientific evidence. The paradigm shift is further demonstrated in clinical guidelines, clinical pathways, and best practices for aphasia intervention that have been developed worldwide. With additional sound research, investigators will discover which program elements are critical for success. In the meantime, Aphasia Centers provide an important treatment option for people with aphasia, family members, and friends.

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