

Interprofessional Practice Survey Results

June 2021

Introduction

The American Speech-Language-Hearing Association (ASHA) is focusing on advancing interprofessional education and interprofessional collaborative practice (IPE/IPP) as part of its *Strategic Plan*. As part of this initiative, ASHA fielded a survey to a random sample of 8,796 ASHA-certified audiologists and speech-language pathologists (SLPs)—approximately 4,300 from each profession—who reported being employed full time as a clinical service provider in the United States or U.S. Territories.

The purpose of the 2021 survey was to gather progress data for an ASHA Strategic Plan initiative on advancing IPP. A similar survey was fielded in 2016, 2017, and 2019 to collect baseline data. The 2021 survey was fielded on April 29, 2021. Follow-up reminders were sent to nonrespondents on May 6 and May 13. The survey was closed on May 21. Of the 8,796 individuals, 170 opted out of this and future online surveys, and 118 e-mails bounced, leaving 8,508 possible respondents. The actual number of respondents was 916, for a 10.8% response rate. Respondents had an opportunity to enter a drawing for a \$100 Amazon gift card.

Highlights

- Across all respondents, 43% were employed in a school setting, 26% in a nonresidential health care facility such as a private practice or clinic, 17% in a hospital, and the remainder in a college/university or in a residential health care or other facility.
- The majority of respondents (92%), by design, were employed as clinical service providers.
- Most respondents—73% of audiologists, 91% of SLPs working in health care, and 91% of SLPs working in schools—reported that they had engaged in IPP in their primary work setting during the past 12 months using the World Health Organization's definition of IPP.
- When asked to reflect on a recent IPP team experience relative to 18 specific IPP behavioral statements (e.g., "My colleagues from other fields treat me with respect"), the majority of respondents across all groups reported that positive IPP experiences happened "almost always" or "most of the time." Lowest on the list were "The team talks together about our professional similarities and differences" and "administrative duties that support the team, such as minute taking, are shared," which were rated as "almost always" or "most of the time" by 64% and 66%, respectively, of all respondents.
- Furthermore, 36% of all respondents answered "almost always" or "most of the time" to all 18 statements, and 69% responded "almost always" or "most of the time" to at least 16 of the 18 statements. The percentage of respondents who indicated "almost always" or "most of the time" to at least 16 of the 18 IPP target statements was selected as the 2016 baseline performance metric for ASHA's Strategic Objective #2 (43% of audiologists, 63% of SLPs in health care, and 64% of SLPs in schools). In 2021, 65% of audiologists, 67% of SLPs in health care, and 72% of SLPs in schools indicated "almost always" or "most of the time" to at least 16 of the 18 IPP target statements.
- Most—85% of audiologists, 71% of health care—based SLPs, and 82% of school-based SLPs—reported being satisfied with the degree of collaboration on their IPP teams.
- Overall, 38% of respondents indicated that the culture at their facility/school was very conducive to engagement in IPP.
- The majority of respondents (62%) did not have any formal education or training in IPP.

- A higher percentage of SLPs—56% of SLPs in health care and 49% of SLPs in schools—reported that they felt very prepared to effectively participate on IPP teams, compared with 37% of audiologists.
- Far fewer—22% of all respondents—indicated that they felt very prepared to <u>lead</u> an IPP team of multiple professionals.

Results

Analyses are presented separately for audiologists, health care—based speech-language pathologists (SLPs), and school—based SLPs, as well as for all respondents combined. Percentages are rounded and may not add to exactly 100%. Data for "all respondents" are unweighted.

Screening Question

The first survey question was intended to identify those professionals who had the opportunity to engage in IPP—that is, their caseloads included services provided to patients, clients, and/or students who were also receiving services from other health care or education service providers. Respondents who answered "no" to question 1 were automatically skipped to the end of the survey. The 6.6% (n = 60) shown under "all respondents" are not included under the "Audiologists," "SLPs in Health Care," or "SLPs in Schools" columns because they did not proceed through the survey to respond to the professional area question (Question 2) or the primary work setting question (Question 3). Also, the "All Respondents" total (n = 916) exceeds the sum of the "Audiologists," "SLPs in Health Care," "SLPs in Schools," and "No" responses because some primary work setting categories (i.e., "College/University," "Not Currently Employed," and "Other") are reflected only under the "All Respondents" category. This is the case for subsequent questions as well.

1. In the last 12 months, has your caseload included services provided to patients/clients/students who were also receiving services from other health care or education service providers?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Yes	100.0	100.0	100.0	93.4
No	0.0	0.0	0.0	6.6

 $^{^{}a}n = 286.$ $^{b}n = 185.$ $^{c}n = 324.$ $^{d}n = 916.$

Demographics

2. In which of the following professional area(s) do you work? (Check all that apply.)

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Audiology	100.0	0.5	0.9	33.5
Speech-language pathology	2.4	100.0	100.0	66.7
Neither audiology nor speech- language pathology	0.0	0.0	0.0	0.7

 $^{^{}a}n = 286.$ $^{b}n = 185.$ $^{c}n = 324.$ $^{d}n = 855.$

Respondents who answered "Neither audiology nor speech-language pathology" to Question 2 were automatically skipped to the end of the survey. These individuals were not audiologists or SLPs in a health care or school setting and were, therefore, outside the scope of this survey.

3. What is your primary work setting?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
School	15.4	0.0	100.0	43.0
College/university	1.4	0.0	0.0	1.3
Hospital	28.7	31.9	0.0	16.6
Residential health care facility (skilled nursing facility, etc.)	0.3	23.8	0.0	5.3
Nonresidential health care facility (private practice, physician's office, clinic, etc.)	49.3	44.3	0.0	26.1
Not currently employed (student, retired, etc.)	0.0	0.0	0.0	0.5
Other (see below)	4.9	0.0	0.0	7.2

Note. Respondents who selected "Not currently employed" were automatically skipped to the end of the survey. ${}^{a}n = 286$. ${}^{b}n = 185$. ${}^{c}n = 324$. ${}^{d}n = 849$.

Other responses included the following:

- Audiologists Education service district; early intervention; hearing aid office; manufacturer; military (3 responses); multiple settings; outpatient (2 responses); state agency; VA (3 responses)
- SLPs— Contract with school, nonresidential, and home-based services; early intervention (20 responses); home health (20 responses); multiple settings (3 responses); non-clinical appeals/denials; outpatient (2 responses); payer; telehealth

According to <u>ASHA's 2020 year-end counts</u>, 47.9% of all constituents are employed in a school setting, 3.0% in a college/university, 13.2% in a hospital, 9.2% in a residential health care facility, 19.7% in a nonresidential health care facility, and 7.0% in another setting. The primary employment facility of survey respondents differs from that of the overall ASHA constituency because the survey sample targeted those who are employed full time as clinical service providers. Ample representation was received for all targeted categories.

4. What is your primary employment function?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Clinical service provider	97.2	95.7	88.8	92.4
Special education teacher	0.0	0.0	8.4	3.2
College/university instructor	0.4	0.0	0.0	0.6
Researcher	0.4	0.0	0.0	0.1
Consultant	0.4	1.1	0.0	0.6
Administrator	1.4	2.7	0.9	1.7
Other (see below)	0.4	0.5	1.9	1.4

 $^{^{}a}n = 285. ^{b}n = 184. ^{c}n = 321. ^{d}n = 840.$

Other responses included the following:

- Audiologists—Multiple roles
- SLPs in Health Care—Lead SLP
- SLPs in Schools—Assistive technology; evaluator; lead SLP; mentor to other SLPs; multiple roles; support services professional
- All Respondents—Appeals denials coordinator; evaluator; multiple roles (2 responses)

5. How many years have you been employed in the audiology and/or speech-language pathology profession? (Exclude your clinical fellowship. Round to the nearest full year. Enter "0" if you have never been employed in the profession/s.)

Statistic	Audiologists (%) ^a	SLPs in Health Care (%) ^b	SLPs in Schools (%) ^c	All Respondents (%) ^d
Median	18.0	12.0	15.0	15.0
Mean	18.4	14.3	16.0	16.5
Standard deviation	13.0	10.3	10.1	11.4
Range	1-48	0-44	1-45	0-48

 $^{^{}a}n = 286. ^{b}n = 185. ^{c}n = 323. ^{d}n = 844.$

Interprofessional Collaborative Practice (IPP)

The next section of the survey focused on respondents' participation in IPP. Individuals were provided with the following definition at this point in the online survey.

For the purposes of this survey, "interprofessional collaborative practice" occurs when two or more individuals from different fields work together to provide comprehensive, integrated services (e.g., develop and implement a treatment plan collaboratively as a team) in a health care environment or school setting.

This definition is based on the <u>World Health Organization (WHO) framework</u>. The definition also appeared before Questions 8–13.

6. During the past 12 months, have you engaged in interprofessional collaborative practice, as defined above, in your primary work setting?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Yes	72.7	90.8	90.7	84.8
No	27.3	9.2	9.3	15.2

Note. Respondents who selected "No" were automatically skipped to question 10. $^an = 286$. $^bn = 185$. $^cn = 322$. $^dn = 843$.

The following question is based on the Interprofessional Collaborative Practice Survey in the toolkit titled <u>Enhancing</u> <u>Capacity for Interprofessional Collaboration: A Resource to Support Program Planning - Toronto Rehabilitation</u> <u>Institute (February 2009)</u> (Part 3, p. 4).

7. For the next set of questions, consider <u>one</u> health care or school-based team experience that you have had within the past 12 months.

Audiologists	Almost always	Most of the time	"Almost always" and "most of the time" (combined)	Less than half the time	Almost never
My colleagues from other fields treat me with respect.	68.2	29.7	97.9	2.1	0.0
I work with my team to make decisions based on consensus.	72.8	21.0	93.8	5.6	0.5
I accept ownership for resolving conflict with team members.	64.4	31.4	95.8	1.0	3.1
When I have a disagreement with a colleague, I ask questions in order to understand their perspective.	62.9	34.0	96.9	3.1	0.0
I take time to explain my roles and responsibilities to colleagues.*	56.4	27.7	84.1	11.3	4.6
Leadership is shared in team meetings.	40.6	41.1	81.7	11.5	6.8
When two team members can both perform a task, we make a decision about it.	65.3	29.0	94.3	2.6	3.1
I am consistent in sharing patient/student information with my colleagues.**	71.6	26.3	97.9	1.5	0.5
I willingly engage in shared decision-making.	77.9	21.0	98.9	1.0	0.0
The team talks together about our professional similarities and differences.	33.7	27.6	61.3	27.1	11.6
I trust decisions made by the interprofessional team.	57.9	39.9	97.8	2.2	0.0
Administrative duties that support the team, such as minute taking, are shared.	31.7	37.8	69.5	11.1	19.4
I acknowledge my team members' qualities and skills regularly.	68.5	27.6	96.1	3.3	0.6
I involve patients/students/families in their treatment plans.	81.5	15.8	97.3	1.1	1.6
When deciding on treatment plans, I consult with colleagues from other fields.	43.1	34.8	77.9	19.3	2.8
I am comfortable receiving feedback from team members.	74.7	23.1	97.8	2.2	0.0
The team includes everyone who supports patient/student care in my area, including clinicians, team members who provide administrative support, teachers, etc.	52.5	33.9	86.4	12.0	1.6
I feel included in my health care/school-based team.	47.8	41.8	89.6	8.2	2.2

^{*}This item was phrased as, "I take time to explain my role to colleagues" in previous surveys.

^{**} This item was phrased as, "I am consistent in sharing patient/student information" in previous surveys. $n \ge 180$.

SLPs in Health Care	Almost always	Most of the time	"Almost always" and "most of the time" (combined)	Less than half the time	Almost never
My colleagues from other fields treat me with respect.	68.1	28.8	96.9	3.1	0.0
I work with my team to make decisions based on consensus.	63.8	30.7	94.5	5.5	0.0
I accept ownership for resolving conflict with team members.	67.5	26.4	93.9	5.5	0.6
When I have a disagreement with a colleague, I ask questions in order to understand their perspective.	66.9	31.9	98.8	1.2	0.0
I take time to explain my roles and responsibilities to colleagues.*	53.4	31.9	85.3	12.9	1.8
Leadership is shared in team meetings.	37.9	42.9	80.8	16.8	2.5
When two team members can both perform a task, we make a decision about it.	63.2	31.3	94.5	4.9	0.6
I am consistent in sharing patient/student information with my colleagues.**	70.6	27.6	98.2	1.8	0.0
I willingly engage in shared decision-making.	80.6	17.5	98.1	1.9	0.0
The team talks together about our professional similarities and differences.	35.6	30.0	65.6	25.0	9.4
I trust decisions made by the interprofessional team.	58.4	40.4	98.8	1.2	0.0
Administrative duties that support the team, such as minute taking, are shared.	28.5	26.6	55.1	23.4	21.5
I acknowledge my team members' qualities and skills regularly.	67.7	29.2	96.9	3.1	0.0
I involve patients/students/families in their treatment plans.	82.0	15.5	97.5	2.5	0.0
When deciding on treatment plans, I consult with colleagues from other fields.	36.0	38.5	74.5	23.0	2.5
I am comfortable receiving feedback from team members.	67.1	31.7	98.8	1.2	0.0
The team includes everyone who supports patient/student care in my area, including clinicians, team members who provide administrative support, teachers, etc.	53.8	35.0	88.8	8.8	2.5
I feel included in my health care/school-based team.	52.2	39.1	91.3	7.5	1.2

^{*}This item was phrased as, "I take time to explain my role to colleagues" in previous surveys.

** This item was phrased as, "I am consistent in sharing patient/student information" in previous surveys. *n* ≥ 158.

SLPs in Schools	Almost always	Most of the time	"Almost always" and "most of the time" (combined)	Less than half the time	Almost never
My colleagues from other fields treat me with respect.	68.9	27.5	96.4	2.5	1.1
I work with my team to make decisions based on consensus.	67.9	28.9	96.8	2.5	0.7
I accept ownership for resolving conflict with team members.	61.4	32.1	93.5	5.0	1.4
When I have a disagreement with a colleague, I ask questions in order to understand their perspective.	59.3	37.9	97.2	2.1	0.7
I take time to explain my roles and responsibilities to colleagues.*	43.6	40.7	84.3	12.9	2.9
Leadership is shared in team meetings.	43.7	38.7	82.4	15.4	2.2
When two team members can both perform a task, we make a decision about it.	57.9	38.6	96.5	2.9	0.7
I am consistent in sharing patient/student information with my colleagues.**	73.3	23.8	97.1	2.8	0.0
I willingly engage in shared decision-making.	82.1	15.7	97.8	2.1	0.0
The team talks together about our professional similarities and differences.	27.7	36.9	64.6	23.4	12.0
I trust decisions made by the interprofessional team.	51.3	45.1	96.4	3.3	0.4
Administrative duties that support the team, such as minute taking, are shared.	33.0	34.4	67.4	16.5	16.1
I acknowledge my team members' qualities and skills regularly.	67.0	28.6	95.6	3.3	1.1
I involve patients/students/families in their treatment plans.	69.1	25.7	94.8	4.8	0.4
When deciding on treatment plans, I consult with colleagues from other fields.	44.1	37.9	82.0	16.5	1.5
I am comfortable receiving feedback from team members.	64.8	33.0	97.8	1.8	0.4
The team includes everyone who supports patient/student care in my area, including clinicians, team members who provide administrative support, teachers, etc.	60.4	32.6	93.0	5.5	1.5
I feel included in my health care/school-based team.	56.0	35.9	91.9	6.6	1.5

^{*}This item was phrased as, "I take time to explain my role to colleagues" in previous surveys.

^{**} This item was phrased as, "I am consistent in sharing patient/student information" in previous surveys. $n \ge 272$.

All Respondents	Almost always	Most of the time	"Almost always" and "most of the time" (combined)	Less than half the time	Almost never
My colleagues from other fields treat me with respect.	69.0	28.0	97.0	2.5	0.4
I work with my team to make decisions based on consensus.	68.0	27.5	95.5	4.1	0.4
I accept ownership for resolving conflict with team members.	63.2	30.9	94.1	4.1	1.8
When I have a disagreement with a colleague, I ask questions in order to understand their perspective.	62.4	34.7	97.1	2.5	0.4
I take time to explain my roles and responsibilities to colleagues.*	48.9	35.2	84.1	12.6	3.2
Leadership is shared in team meetings.	42.4	39.9	82.3	14.2	3.6
When two team members can both perform a task, we make a decision about it.	62.3	33.3	95.6	3.1	1.3
I am consistent in sharing patient/student information with my colleagues.**	72.0	25.7	97.7	2.1	0.3
I willingly engage in shared decision-making.	80.5	17.7	98.2	1.8	0.0
The team talks together about our professional similarities and differences.	31.5	32.7	64.2	24.6	11.2
I trust decisions made by the interprofessional team.	56.5	40.9	97.4	2.4	0.2
Administrative duties that support the team, such as minute taking, are shared.	32.6	32.9	65.5	16.5	18.0
I acknowledge my team members' qualities and skills regularly.	68.2	27.8	96.0	3.3	0.6
I involve patients/students/families in their treatment plans.	77.4	19.1	96.5	2.9	0.6
When deciding on treatment plans, I consult with colleagues from other fields.	42.0	37.0	79.0	18.7	2.3
I am comfortable receiving feedback from team members.	68.1	30.0	98.1	1.7	0.2
The team includes everyone who supports patient/student care in my area, including clinicians, team members who provide administrative support, teachers, etc.	57.5	32.8	90.3	7.9	1.8
I feel included in my health care/school-based team.	53.6	37.8	91.4	7.1	1.5

^{*}This item was phrased as, "I take time to explain my role to colleagues" in previous surveys.

^{**} This item was phrased as, "I am consistent in sharing patient/student information" in previous surveys. $n \ge 654$.

In addition to examining the frequency of responses *across all respondents*, as shown in the above tables, the research team was also interested in exploring how a single individual responded to the self-assessment items. That is, we wanted to know how many respondents answered "Almost always" or "Most of the time" <u>to all items</u> in Question 7 for a given IPP experience.

Group	Audio	ogists	SLPs in Health Care		SLPs in Schools		All Respondents	
	#	%	#	%	#	%	#	%
Responded "Almost								
always" or "Most of the	69	35.4	54	33.1	100	35.6	242	35.5
time" to all items in Q7								
Did <u>not</u> respond "Almost								
always" or "Most of the	126	64.6	109	66.9	181	64.4	440	64.5
time" to all items in Q7								
Total # respondents	195	100.0	163	100.0	281	100.0	682	100.0

To allow a little latitude, we also examined how many respondents answered "Almost always" or "Most of the time" to at least 16 of the 18 items (approximately 90% of the IPP target behaviors) in Question 7.

Group	Audiol	ogists	SLPs in Health Care		SLPs in Schools		All Respondents	
	#	%	#	%	#	%	#	%
Responded "Almost always"								
or "Most of the time" to at	127	65.1	109	66.9	203	72.2	470	68.9
least 16 items in Q7								
Did <u>not</u> respond "Almost								
always" or "Most of the	68	34.9	54	54 33.1	78 27.8	27.0	212	31.1
time" to at least 16 items in	08	34.9	34					
Q7								
Total # respondents	195	100.0	163	100.0	281	100.0	682	100.0

8. Select the other health care or education service professions that were part of your IPP team for which you based your responses to the previous question. (Check all that apply.)

Pagnanca	Audiologists ^a	SLPs in Health	SLPs in	All Respondents ^d
Response	(%)	Care ^b (%)	Schools ^c (%)	(%)
Applied behavior analysis	7.7	21.5	29.2	20.3
Audiology	67.4	10.8	17.9	29.6
Dentistry	5.0	10.8	1.1	4.7
Education (including regular				
education teachers, aides,	54.7	21.5	82.8	57.7
assistants, or administrators)				
Genetics	8.8	4.4	0.4	3.8
Medicine (including primary care	61.3	58.9	6.6	36.2
or specialty care)	01.5	30.3	0.0	30.2
Music therapy	3.3	7.6	4.0	4.6
Nursing (including clinical or	30.9	51.3	28.8	35.3
school nursing)	30.3	31.3	20.0	33.3
Nutrition/dietetics	3.3	46.8	1.5	14.7
Occupational therapy	32.6	90.5	85.8	72.4
Optometry	6.6	1.3	0.7	2.7

Orthodontics and/or	0.6	1.9	1.1	1.2
prosthodontics				
Pharmacy	2.8	8.9	0.4	3.5
Physical therapy	39.2	76.6	64.6	61.5
Psychology (including clinical or school psychology)	35.9	32.3	55.1	42.1
Public/community health	3.3	1.3	2.6	2.9
Radiology	3.9	19.6	0.4	6.3
Reading (including reading specialists)	12.7	3.2	23.7	14.4
Social work	22.7	46.2	37.6	36.5
Special education (including special education teachers, aides, assistants, or administrators)	39.2	21.5	91.2	56.9
Speech-language pathology	65.2	62.7	71.2	66.7
Surgery (including maxillofacial, oral, plastic)	24.3	15.2	2.6	11.9
Other (see below)	13.8	8.2	8.0	10.7

 $a_n = 181$. $b_n = 158$. $c_n = 274$. $d_n = 655$.

Other responses included the following:

- Audiologists—Developmental/behavioral pediatrics; diagnostician; ENT (3 responses); government counselors
 for vocational rehabilitation; hearing aid technician; intervention specialists; neurology (2 responses);
 neurotology; oncology; oncology and infectious disease; otolaryngology (3 responses); otology; PA; parent
 advisors/parent-to-parent support providers, service coordinators, interpreters, ENTs; rehabilitation counselor;
 teacher of the deaf/HOH (3 responses); teachers of the blind/visually impaired, teachers of physical and other
 health disabilities, autism specialists; third party non-insurance contractor contracts
- SLPs in Health Care—Activities department; administration, director of risk management; case management (2 responses); case worker and parent; client's family; recreation therapy; recreation therapy, child life specialist; recreational activities; respiratory therapy (2 responses); the individual receiving services and her spouse were also included because it's ultimately their time, resources and treatment; university professors; vocational rehab
- SLPs in Schools—AAC, behavioral specialist; adaptive physical education; administrative support staff; administrators (2 responses); assistive technology specialists; behavior resource specialist; behavior specialist (not ABA) (2 responses); counseling, ELL specialist/interpreters; deaf-blind specialists and vision specialists; diagnostician; educational diagnostician; infant learning providers who provide Part B services; neurologist; school counselor; school psychologist; school-based vision therapists, deaf education teachers and deaf interpretors, adapted physical educators; teacher of the deaf; teacher of the deaf, sign skills coach, vision therapy, behavior therapy; TVI; vision specialist
- All Respondents—Assisted living resident care director; developmental specialists; developmental therapist (2 responses); ENT; ENT, pediatrician; GI, neuro, cardiology; LPC; parent advisors/parent-to-parent support providers, service coordinators, interpreters, ENTs; service coordinator; VI, OMI, parents, counseling, patients

IPP Culture

9. Are you satisfied with the degree of collaboration on your IPP team(s)?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Yes	85.1	71.3	81.8	80.5
No	11.6	19.4	10.2	12.8
I don't know	3.3	9.4	8.0	6.7

 $^{^{}a}n = 181$. $^{b}n = 160$. $^{c}n = 274$. $^{d}n = 657$.

10. What are some of the barriers that you have encountered relative to engaging in IPP at your facility/school? (Check all that apply.)

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
High workload/caseload	40.5	44.8	70.1	53.0
I don know what IPP "looks" like in				
my current setting	12.0	2.9	2.8	5.8
Lack of collaboration by other				
service providers in my setting	19.8	18.6	21.5	19.9
Lack of training in IPP	12.0	12.8	13.9	12.6
Limited support from				
administration	15.7	17.4	24.7	19.5
Limited time for collaboration	55.8	66.9	79.2	67.7
Limited understanding of my role	21.9	21.5	24.3	22.0
No clinical need	13.2	2.3	2.1	5.9
Other health care or education service providers are not colocated in my setting to easily				
facilitate collaboration	40.9	26.7	27.8	33.0
Productivity or billing practices				
don't support	24.4	54.1	15.3	28.2
Scope of practice infringement	7.0	7.6	6.6	6.8
Other (see below)	2.9	8.7	8.7	6.7

 $^{^{}a}n = 242.$ $^{b}n = 172.$ $^{c}n = 288.$ $^{d}n = 745.$

Other responses included the following:

Audiologists—

- Busy schedules of professionals
- extended medical leave over the last year (non COVID-related)
- I really haven't encountered any barriers
- Lack of cooperation
- Lack of in-person services due to the pandemic.
- My colleague works closely with schools than I do
- Survey apparently looking for SLP responses, not audiology

SLPs in Health Care—

- ABA doing SLP work, 35 hrs/wk
- Agency practices
- COVID precautions
- Difficulty getting physicians to collaborate when not in a major hospital setting any longer, now in private practice and contracted with small clinics to teach feeding therapy
- Due to the pandemic interaction has been severely limited
- I'm only part time and others are full time
- Limited time to improve the other issues
- None (4 responses)
- Nursing staff carry over
- Other services were not interested and/or motivated to collaborate even when I tried to engage them
- Our practice bills insurance for services. Insurance companies require individual treatment plans and treatment sessions when more than one discipline is involved.
- Scheduling

SLPs in Schools-

- Administration does not understand my role nor do they bother to educate themselves about it. I offer and am not heard. I am pulled from my responsibilities to do menial duties, yet I have overwhelming caseloads and a range of duties no other faculty memb r has: student centered therapy time, in class time, testing, over 100 parent meetings per year and report writing and billing. Collaboration time is non existent. As is lunch. Perhaps admin would like to try to help solve it? Or even care.
- Administration refuses to allow LRE instruction for my practice
- COVID
- COVID, online learning, and new employees on site
- Current procedures don't encourage much IPP
- Difficulty with engagement with general educators
- Distance education
- Fragmentation of education in general. For example, specialization in most areas of education provide vision into one corner of the forest; however, the rest of the forest is unknown and unexplored. Specialization leads to fragmentated and separated pools of water from which only 1 person swims. Obviously, our desire is to swim in one flowing river. Therefore, a key step in establishing IPP is to acknowledge that our our "special" disciples can unintentionally create barriers to IPP.
- Frequent turnover of support staff in my school setting makes it difficult to build trust and generally results in silo effects.
- I spend any "free" time dealing with Medicaid billing
- I try but others view the time as loosing time needed to service students or assessments and not required from administration. Administration is not easy to change and view it as time away from direct intervention.
- I'm a teletherapist and all the teachers are in-person at the school
- In school setting, paperwork requirements
- Lack of transparency from the district
- Level of responsibility placed on me
- Limited or unknown resource availability in my setting
- No barriers. Teams of therapists and other professionals serve individual classrooms.
- Non inclusion of paraprofessionals in team meetings
- None (3 responses)
- Others' lack of training in IPP (admin and team members don't always know it is a "thing" at all, much less that it is best practice!)

- Schedule changes within the school
- Special education is often an afterthought (if thought of at all) by non-sped team members
- Speech pathology does not get the same respect/consideration when making decisions. Example: In order to refer for academic support, the team will not even consider a referral without intervention data. Yet they immediately refer for speech therapy without intervention data.

All Respondents—

- For billing purposes we cannot treat simultaneously
- Have not encountered barriers
- Occasional delay in manager response to problem encountered in the field when managers are in meetings, assisting others, etc.
- 11. How conducive is the culture to engage in IPP at your facility/school?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Very conducive	35.3	41.4	40.4	39.9
Somewhat conducive	45.8	46.6	44.1	44.4
Not very conducive	14.1	9.8	12.1	12.2
Not at all conducive	4.8	2.3	3.4	3.5

 $^{^{}a}n = 249$. $^{b}n = 174$. $^{c}n = 297$. $^{d}n = 764$.

IPP Preparedness

12. Have you had any formal education or training on IPP (academic or clinical coursework in IPP, professional development activity specifically on IPP, etc.)?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Yes	31.7	39.4	40.7	37.9
No	68.3	60.6	59.3	62.1

 $^{^{}a}n = 249$. $^{b}n = 175$. $^{c}n = 297$. $^{d}n = 763$.

13. How have you acquired your skills/knowledge in the area of IPP? (Check all that apply.)

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
External professional development (e.g., conference or conference session, webinar, workshop)	22.7	13.3	20.8	20.1
In-service	7.4	9.5	14	10.9
IPE/IPP published literature	6.7	2.9	3.9	4.7
On-the-job	77.9	94.3	88.8	86.5
Self-taught	47.9	49.5	47.8	48.2

 $^{^{}a}n = 163. ^{b}n = 105. ^{c}n = 178. ^{d}n = 467.$

14. How prepared do you feel you are to effectively participate on IPP teams?

Response	Audiologists ^a	SLPs in Health	SLPs in	All Respondents ^d
	(%)	Care ^b (%)	Schools ^c (%)	(%)
Very prepared	37.0	55.7	48.8	47.2
Somewhat prepared	44.3	40.2	44.4	42.8
Not very prepared	14.6	2.9	6.7	8.3
Not at all prepared	4.1	1.1	48.8	1.7

 $^{^{}a}n = 246. \,^{b}n = 174. \,^{c}n \, 297. \,^{d}n = 759.$

15. How prepared do you feel you are to lead an IPP team of multiple (health care or education) professionals?

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Very prepared	10.4	29.8	24.0	21.5
Somewhat prepared	39.4	46.8	45.9	43.9
Not very prepared	31.1	18.1	22.6	24.2
Not at all prepared	19.1	5.3	7.4	10.4

 $^{^{}a}n = 241$. $^{b}n = 171$. $^{c}n = 296$. $^{d}n = 749$.

16. What are the reasons you engage in IPP? (Check all that apply.)

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Advance professional skill set	33.2	47.4	38.7	39.9
Billing requirements	3.0	3.5	1.7	2.7
Caseload/workload management	21.3	29.2	39.7	30.8
Fewer preventable errors	23.8	33.3	22.6	25.8
Improved patient/client outcomes	83.0	93.0	91.4	88.9
Improved patient/client satisfaction	71.5	81.9	58.9	69.3
Improved quality of care	82.1	94.7	74.0	82.0
Improved relationships with other disciplines	67.2	75.4	72.9	71.5
Reduced clinical stress and burnout	7.7	29.2	26	21.1
Reduced health care costs	5.1	12.3	0.7	5.1
Other (see below)	7.7	2.9	3.1	5.0

 $^{^{}a}n = 235$. $^{b}n = 171$. $^{c}n = 292$. $^{d}n = 740$.

Other responses included the following:

Audiologists-

- Again, this should have been directed to SLP members, not audiology
- Appropriate in school settings where students receive multiple services
- ASHA requirements
- Best practice for the patient
- Does not apply
- I am not sure if I do or not
- I do not engage in IPP (3 responses)

- I do not know
- I don't, I guess. Not needed at an ENT practice
- I don't. I provide contracted services to 17 school systems.
- It is the model used in special education
- Necessary to meet patient care needs/implement treatment plan
- None
- Required for complex patients
- Results. IEP
- This does not apply in my practice as we are the "rule out" test before speech therapy for delayed speech.

SLPs in Health Care—

- Consultant on a CLP team
- Improve my own skills
- Learning about the other treatment goals a person has outside of speech therapy. Also to learn more about
 the other disciplines to make appropriate referrals and incorporate HEP for greater carry-over into my own
 sessions as appropriate.
- Never inserviced
- Our El program participates in coaching so it is a requirement

SLPs in Schools—

- IEP meetings are required by law. That is the only time we are all together to discuss our students.
- Improved student outcomes
- Make more providers happy with the outcome
- Positive moral within the team
- The function of speech therapy in the schools is to help the student access the academic curriculum. Carryover of strategies into the classroom by the teacher allows the student to receive support in the least restrictive environment.
- The reasons listed were if I were permitted to do it at my job.
- To build the strongest team possible
- We don't do it so I don't know.
- When working with bilingual families it helps when bilingual providers work together with monolingual providers.

All Respondents—

- ASHA requirements
- Evaluations and IFSP
- I enjoy functioning as a team
- Our program model is interdisciplinary
- We use a primary service provider method for service delivery so we have to work together to get the best outcomes for children and their families.
- Wholistic theory of practice

Question 6 was repeated at the end of the survey to determine any change in response as participants were made aware of the specific aspects of IPP while taking the survey.

17. This survey posed questions that may have changed the way that you think about IPP. Would you now say that you have engaged in interprofessional collaborative practice in your primary work setting in the past 12 months?*

Response	Audiologists ^a (%)	SLPs in Health Care ^b (%)	SLPs in Schools ^c (%)	All Respondents ^d (%)
Yes	76.9	89.5	89.8	85.6
No	23.1	10.5	10.2	14.4

 $^{^{}a}n = 242.$ $^{b}n = 171.$ $^{c}n = 293.$ $^{d}n = 749.$

The following table presents the differences in "Yes" responses between Questions 6 and 17. Note that the number of respondents to Questions 6 and 17 differed, as some individuals dropped out of the survey before completing it in its entirety. There was little difference in responses. The largest change was for audiologists, with 4.2% more indicating at the end of the survey that they engaged in interprofessional collaborative practice (compared to the percentage indicating so at the beginning of the survey).

Response	Audiologists (%)	SLPs in Health Care (%)	SLPs in Schools (%)	All Respondents (%)
Question 6 = yes	72.7	90.8	90.7	84.8
Question 17 = yes	76.9	89.5	89.8	85.6
Difference (%) in response from start of survey to end of survey	4.2	-1.3	-0.9	0.8

^{*}Note: This question was worded as follows on the 2016 and 2017 surveys: "Given your ratings of IPP competencies in this survey, have you engaged in interprofessional collaborative practice in your primary work setting in the past 12 months?"

Finally, the research team wanted to examine the individual responses to Question 7 by whether or not respondents had received any formal education or training on IPP (Question 12). The total number of respondents displayed in the following tables excludes those who did <u>not</u> respond "Almost always" or "Most of the time" <u>to all items</u> in Question 7 (top table in that question) or did <u>not</u> respond "Almost always" or "Most of the time" <u>to at least 16 of the 18 items (89%)</u> in Question 7 (bottom table in that question). In both cases, respondents who had not received formal education or training on IPP were more likely to rate either all 18 statements or 16 of the 18 statements as "Almost always" or "Most of the time."

Responded "Almost always" or "Most of the time" to all items in Question 7.

Group	Audiologists		SLPs in Health Care		SLPs in Schools		All Respondents	
	#	%	#	%	#	%	#	%
Had formal education or training on IPP (Q12 = yes)	21	30.9	27	50.9	33	34.4	90	38.3
Did not have formal education or training on IPP (Q12 = no)	47	69.1	26	49.1	63	65.6	145	61.7
Total # of respondents	68		53		96		235	

Responded "Almost always" or "Most of the time" to at least 16 of the 18 items (89%) in Question 7.

Group	Audiologists		SLPs in Health Care		SLPs in Schools		All Respondents	
	#	%	#	%	#	%	#	%
Had formal	40	32.5	43	40.2	75	37.7	174	38.0
education or								
training on IPP								
(Q12 = yes)								
Did not have formal	83	67.5	64	59.8	124	62.3	284	62.0
education or								
training on IPP								
(Q12= no)								
Total # respondents	123		107		199		458	

Additional resources on ASHA's IPP initiatives may be found at <u>Interprofessional Education/ Interprofessional Practice (IPE/IPP) (asha.org)</u>.