

Year 13: Additional exploratory analyses for frequency and duration (9.2.2016)

Excluding RSP records

- If all RSP records were removed from the frequency analyses, the weighted population estimate for frequency would decline from 85.3% (confidence interval of 83.9% - 86.6%) to **81.6% (79.9% - 83.3%)**.
- If all RSP records were removed from the duration analysis, the weighted population estimate for duration would increase from 70.5% (confidence interval of 68.8% - 72.3%) to **72.8% (70.9% - 74.7%)**.

Excluding services that missed the required frequency by one

- If services that missed the required frequency of 8 or 16 (1x or 2x weekly) by 1 were removed from the analysis, the weighted population estimate for duration would increase from 70.5% (confidence interval of 68.8% - 72.3%) to **73.5% (71.8% - 75.2%)**.
- If all services that missed the required frequency by 1 were removed from the analysis (e.g., not restricted to frequencies of 8 or 16), the weighted population estimate for duration would increase from 70.5% (confidence interval of 68.8% - 72.3%) to **74.5% (72.8% - 76.2%)**.

Increasing the duration flexibility

- From 2% to 10%: Under the current rule, if the total duration provided across an 8-week/2-month period is within 2% of the requirement, the duration requirement is considered to be met (with the exception of certain APE and RSP services in which 90% of the IEP duration is used). If this allowance was extended to 10% of the requirement, the weighted population estimate for duration would increase from 70.5% (confidence interval of 68.8% - 72.3%) to **78.4% (76.9% - 80.0%)**.
- From 2% to 15%: If this allowance was extended to 15% of the requirement, the weighted population estimate for duration would increase from 70.5% (confidence interval of 68.8% - 72.3%) to **85.7% (84.4% - 87.1%)**.

Services that miss both frequency and duration

- Among the services included in both the frequency and duration analysis, 2% missed frequency only, 11% missed both frequency and duration, and 16% missed duration only.

Exhibit 1: Number and percentage of services that missed both frequency and duration, frequency only, or duration only, among records that were included in both the frequency and duration analysis

	Services in both the freq and dur analysis			Missed both frequency and duration		Missed frequency only		Missed duration only	
	N	Missed freq %	Missed dur %	N	%	N	%	N	%
APE	564	14%	21%	47	8%	30	5%	72	13%
DHH	215	14%	15%	24	11%	6	3%	8	4%
LAS	1,012	19%	26%	156	15%	41	4%	105	10%
LRE	103	8%	17%	8	8%	0	0%	9	9%
OT	342	17%	20%	48	14%	9	3%	20	6%
PT	69	14%	13%	8	12%	2	3%	1	1%
SMH	424	13%	29%	43	10%	14	3%	79	19%
VI	212	10%	17%	20	9%	1	0%	15	7%
NPA	253	14%	55%	28	11%	7	3%	111	44%
RSP	1,059	10%	33%	90	8%	12	1%	260	25%
Total <1>	4,259	14%	27%	472	11%	122	3%	680	16%
Most common frequency across 8-wks/2-months				8 (60%)		8 (61%)		8 (29%)	
Most common duration across 8-wks/2-months				240 (47%) <2>		240 (47%)		480 (22%) <3>	

<1> The total includes preschool records, which were suppressed due to low n's.

<2> 20% of the services that missed both frequency and duration had required duration amounts that exceeded 480 minutes.

<3> 58% of services that missed duration only had a required duration amount that exceeded 480 minutes.

Exhibit 2: Service intervals of services that missed both frequency and duration, frequency only, or duration only, among records that were included in both the frequency and duration analysis

Interval of records that missed both frequency and duration

	N	%
Daily	8	2%
Monthly	85	18%
Weekly	379	80%
Total	472	100%

Interval of records that missed frequency only

	N	%
Daily	1	1%
Monthly	22	18%
Weekly	99	81%
Total	122	100

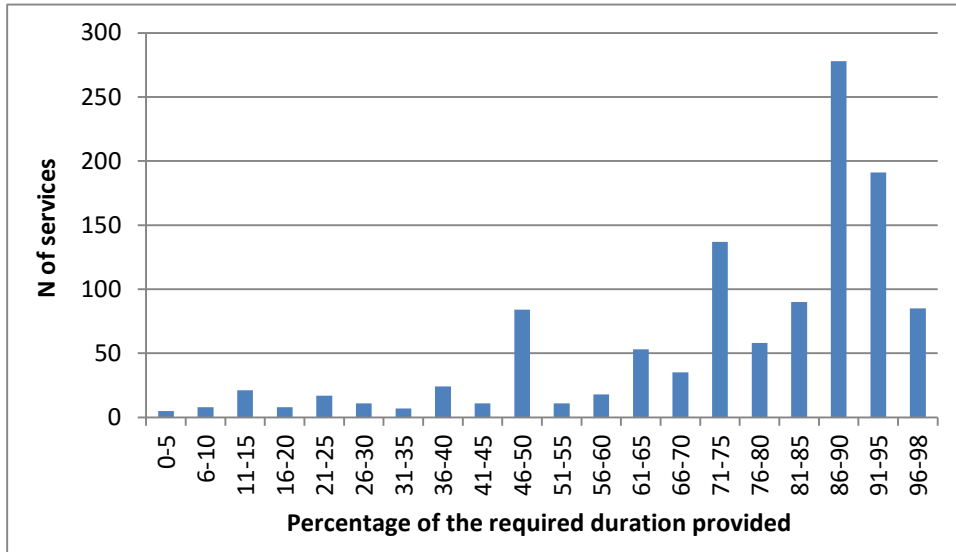
Interval of records that missed duration only

	N	%
Daily	3	0.4%
Monthly	213	31%
Weekly	464	68%
Total	680	100%

Distribution of provided duration in relation to the required duration

Exhibit 3 shows the number of services that missed the duration requirements by the percentage of the required duration that was actually provided. Of the 1,152 services that did not meet the duration requirement, 48% (554) were provided at least 86% of the required duration. At the same time, 39% (450 of 1,152) had provided durations that were 75% or less of the required amount.

Exhibit 3. Number of services by the percentage of required duration provided (among 1,152 services that did not meet the duration requirement)



School level

- Rates by school level were relatively similar (no statistical tests conducted at this time).
- Exhibit 5 shows that LAS and RSP made up 55% of the services that missed duration in elementary schools. RSP was the most common service at the middle and high school levels to miss duration.

Exhibit 4. Frequency and duration rates by school level/type

		Freq met			Freq not met			Dur met			Dur not met		
		N	%	Total	N	%	Total	N	%	Total	N	%	Total
Elem	N	2,395		2,804	409		647	2,028		2,792	764		2,792
	%	85.4		100	14.6		100	72.6		100	27.4		100
Middle	N	560		647	87		644	460		644	184		644
	%	86.6		100	13.5		100	71.4		100	28.6		100
High	N	632		711	79		703	515		703	188		703
	%	88.9		100	11.1		100	73.3		100	26.7		100
SE Centers	N	104		123	19		122	106		122	16		122
	%	84.6		100	15.4		100	86.9		100	13.1		100
Total	N	3,691		4,285	594		4,285	3,109		4,261	1,152		4,261
	%	86.1		100	13.9		100	73.0		100	27.0		100

Exhibit 5. Distribution of services that did not meet duration, by school level/type

	Elem		Middle		High		SE Center		Total N
	N	%	N	%	N	%	N	%	
APE	84	11%	16	9%	15	8%	4	25%	119
DHH	22	3%	6	3%	1	1%	3	19%	32
LAS	205	27%	30	16%	22	12%	4	25%	261
LRE	9	1%	4	2%	4	2%	0	0%	17
OT	59	8%	8	4%	0	0%	0	0%	67
PT	9	1%	0	0%	0	0%	0	0%	9
SMH	57	7%	30	16%	35	19%	0	0%	122
VI	13	2%	6	3%	14	7%	2	13%	35
NPA	93	12%	23	13%	20	11%	3	19%	139
RSP	212	28%	61	33%	77	41%	0	0%	350
Total	764	100%	184	100%	188	100%	16	100%	1152

* Total includes Preschool services, which were suppressed due to low n's.

Number of services

- A larger number of services specified for a student appears not to have a significant effect on the frequency and duration rates. For example, in 322 cases, the students had five or more services reported on their IEPs. Of these services, 86% met frequency requirements and 67% met the duration requirements. This compares to 1,585 – 1,596 cases in which students had just one service reported on their IEPs. Among these services, 86% and 72% met the frequency and duration requirements respectively.

Exhibit 6. Number of services that met frequency or duration, by the number of services required per student

N of services per student	Frequency met	Frequency not met	Total	Duration met	Duration not met	Total
1	1,374	222	1,596	1,135	450	1,585
2	1,098	165	1,263	962	294	1,256
3	606	122	728	533	190	723
4	336	40	376	263	112	375
5 or more	277	45	322	216	106	322
Total	3,691	594	4,285	3,109	1,152	4,261

* The frequency and duration totals differ because some cases were dropped from the duration analysis due to coding rules.

Exhibit 7. Percentage of services that met frequency or duration, by the number of services required per student (based on Exhibit 6 figures)

N of services per student	Frequency met	Frequency not met	Duration met	Duration not met
1	86%	14%	72%	28%
2	87%	13%	77%	23%
3	83%	17%	74%	26%
4	89%	11%	70%	30%
5 or more	86%	14%	67%	33%