A Closer Look by PEI Outcomes

December 2016

A Benchmark for Matched Pairs is a topic of discussion that MHSA Implementation and Outcomes Division has had recently with stakeholders and other interested parties. The purpose of creating a benchmark was to increase the amount of aggregate data that is being used to analyze the efficacy of PEI practices implemented in Los Angeles County. The task was to determine baseline percentage of matched pairs in order to have a data-based discussion of potential benchmarks for matched pairs and completed EBP. This analysis would also include looking at accounting for reasons of what occurs with the balance of clients who complete the practice who might not have a matched pair for analysis.

Methodology: While it was suggested that we look at just a couple of practices to get an idea of matched pairs and determine why matched pairs might be difficult to achieve, after further exploration, it was necessary to look at every questionnaire for every practice in order to ensure no practice was unfairly subjected to a suggested benchmark. We looked at only PEI practices, excluding First 5 funded PCIT, and excluding Mental Health Integration Program (MHIP) since the practice doesn't use Post questionnaires. We also omitted any practices from this first round of analysis that use the Revised Behavior Problem Checklist (RBPC) due to the way the data is captured in PEI OMA. For each practice included, we looked only at completed treatment cycles. For each practice we looked at all questionnaires in play with any of the completed treatment cycles. For each questionnaire, we accounted for 100% of treatment cycles where "Completed EBP" was yes. For each questionnaire, completed EBP yes treatment cycles was split into the following categories: 1) Outside of the age range for this measure, 2) Pres with scores, Posts Unable to collect, 3) Pres with scores, Posts not acknowledged yet, 4) Pre with score, Post with score (matched pair), 5) Pre Unable to collect, Post with score, 6) Pre Unable to collect, Post Unable to collect, 7) Pre unable to collect, post not acknowledged.

Matched pairs percentage for the questionnaire was determined by # of matched pairs divided by # of treatment cycles eligible for the questionnaire. The formula looks like this:

$$\frac{\text{\# of matched pairs for questionnaire}}{((\text{\# of tx cycles Comp EBP yes}) - (\text{\# of clients outside of age range for quest.}))}$$

This will yield a more precise matched pairs percentage than the proxy measure we've been using. To account for 100% of treatment cycles to determine reasons why a matched pair wasn't achieved, treatment cycles will be split into 3 categories, 1) outside of age range for measure, 2) pre unable to collect (with reasons why) 3) post unable to collect (with reasons why) when a pre with scores was collected. Unable to collect reasons were aggregated for categories 2 and 3 and were used to determine why measure was not collected.

Findings: Most of the matched pairs percentages averaged around 55-60% when looking at the data from a countywide all-time perspective. There was some variation where some practices had much lower matched pairs percentages on parent/caregiver measures than self-report measures, yet other practices with parent measures with some of the highest matched pairs percentages amongst any measure (i.e., Incredible Years, Triple P). The standard deviation was about 15. We also looked at the data by fiscal year and matched pairs percentages have improved over the last couple of years with many questionnaires nearing 65-70%.

Top Pre UCS Reasons:

1. Parent/Caregiver Unavailable (2885)
2. Client unavailable (1611)
3. Therapist did not Administer tool (1298)

Top Post UCS Reasons:

1. Administration date exceeds acceptable range (2890)
2. Therapist did not Administer tool (933)
3. Parent/Caregiver Unavailable (377)

Recommendation: Continue to work with providers on incorporating outcomes into workflow to increase volume of data collection and encourage review of the data with teams, families, and clients. We recommend managing to a single benchmark for all questionnaires with the understanding that there are unique characteristics of each practice that might influence the weight given to evaluating performance based on the benchmark. For example, parent measures generally might have lower matched pairs percentages, but if a practice only has a parent measure, perhaps that should be given equal weight to a percentage expected with a self-report measure.

Each practice will have a matched pairs percentage represented for each questionnaire in play with 20 or more matched pairs countywide, or 5 or more matched pairs at the provider level. The benchmark being recommended is 70-85% matched pairs when the client has completed the EBP as indicated by the clinical team. The reports will show colors that correspond to bands of matched pairs percentages to help target where technical assistance might be needed and where providers that are doing very well might be able to share best practices. We will be able to identify strengths and areas that need work fairly easily with the colored bands.

The proposed bands are:

Greater than 85%

70%- 84.99% (benchmark)

60%-69.99%

59.99% or lower

It would be important to also monitor rates of outcomes data entry compliance and also completion vs. drop-out rates to ensure as much data is being captured as possible. Setting benchmarks for these two variables would be recommended as well, but warrants further data analysis.

In addition, in order to assist providers in understanding where their data collection may fall short or to emphasize success in their data acquisition we developed a Matched Pair Summary report that provides useful information.

COUNTY OF LOS ANGELES - DEPARTMENT OF MENTAL HEALTH
Adult System of Care - MHSA Implementation and Outcomes Division
Matched Pair Summary by Practice

Data Updated: 12/7/2016

Practice Name   Interpersonal Psychotherapy for Depression (IPT)

		Completed EBP:	607	100.00%
		Drop Outs:	0	0.00%
		Active Tx Cycles:	0	0.00%

Questionnaire Type	Questionnaire Name	Pre UCS Post UCS	Pres UCS Post Unacknowledged	Pre UCS Post Scored	Pre Scored Post UCS	Pre Scored Post Unacknowledged	Matched Pairs	% Matched Pair	Outside Age Range
General	Outcome Questionnaire – 45.2*	39	4	28	51	4	221	64.06%	262
General	Youth Outcome Questionnaire - 2.01 (Parent)	43	3	22	57	3	127	50.20%	354
General	Youth Outcome Questionnaire – Self Report – 2.0	22	5	17	36	5	173	67.84%	352
Specific	Patient Health Questionnaire (PHQ-9)	52	10	54	91	10	391	65.17%	7

The above illustration shows a practice level report broken out by the general and specific outcome measures used for the practice followed by the number of Pre Unable to Collects (UCS)/Post UCS; Pre UCS/Post Unacknowledged; Pre UCS/Post Scored; Pre Scored/Post UCS; Pre Scored/Post Unacknowledged; Matched Pairs; Matched Pair %, and those clients outside the age range of the measure. The box on the corner right provides the number of clients that have completed the EBP, dropped out, and that are still active in PEI Outcome Measures Application (OMA). The illustration below provides the same information except at the provider level.

COUNTY OF LOS ANGELES - DEPARTMENT OF MENTAL HEALTH
Adult System of Care - MHSA Implementation and Outcomes Division
Matched Pair Summary by Billing Provider

LegalEntityNum: 00019 L.A. COUNTY DMH

Data Updated: 12/7/2016

ProviderName: 1927 LONG BEACH MHS ADULT CLINIC

Practice Name   Individual Cognitive Behavioral Therapy - Anxiety (CBT-Anxiety)

		Completed EBP:	4
		Drop Outs:	0
		Active Tx Cycles:	0

Questionnaire Type	Questionnaire Name	Pre UCS Post UCS	Pres UCS Post Unacknowledged	Pre UCS Post Scored	Pre Scored Post UCS	Pre Scored Post Unacknowledged	Matched Pairs	% Matched Pair	Outside Age Range
General	Outcome Questionnaire – 45.2*	0	0	0	0	0	4	100.00%	0
General	Youth Outcome Questionnaire - 2.01 (Parent)	0	0	0	0	0	0	0.00%	3
General	Youth Outcome Questionnaire – Self Report – 2.0	0	0	0	0	0	0	0.00%	4
Specific	Generalized Anxiety Disorder-7 (GAD-7)	0	0	0	0	0	4	100.00%	0

Again, we are hoping that the creation of this benchmark and these reports will enable providers to increase their pre-post data collection, and in turn, increase the number of clients completing the practice.