# **MAP - Metrics Activation Program**

### Tracey Kibble; M.Ed(CRDS), RRP, RTWDM, CVRP

### **Metrics Vocational Services**



#### INTRODUCTION

#### WHY WAS MAP DESIGNED?

- To support those who have experienced accidents, illness and injuries to promote their activation/reactivation, and functional restoration
- MAP was developed through evidence-based, best-practices from 50+ peer reviewed global journal articles and research findings.
- Decrease STD/LTD claim costs, increase engagement, increase return to work success
- Early intervention is an evidence-based demonstrated factor for success

#### WHAT IS PROVIDED?



#### **KEY COMPONENTS OF MAP**

- Self-efficacy (mastery experiences, verbal persuasion/self-talk, modeling, reinterpretation of symptoms) Motivational interviewing (open ended questions, reflective listening, summarizing, ffirming, eliciting self-motivation) Goal setting (approach vs avoidance, performance vs mastery, difficult vs easy goals, SMART goals)
  - WHO IS APPROPRIATE FOR MAP?

Anyone who has been unable to fully engage in functional vocational or avocational activities for 6+ weeks, who is medically stable and able to engage, with informed consent; including those who have experienced:

- Physical injuries
- Medical illnesses or diagnoses Mental health challenges, addiction
- Chronic pain, chronic medical diagnoses Challenging situations in the workplace
- Individuals with "long covid-19" symptomology
- \*\* Early intervention is ideal, but those who have transitioned to LTD have also demonstrated benefits from participation in MAP to re-establish functional success.

### WHO IS NOT APPROPRIATE FOR MAP?

Individuals who are not able or willing to engage in the goal setting process and/or are unwilling to put forth legitimate effort to make progress

- Individuals who are not medically stable
- ❖ Individuals who are unable to consistently engage in 60 90-minute sessions
- (initial session is typically 90 minutes in length, subsequent sessions are approximately 60 minutes in length)

### DATA COLLECTION:

- Pain Disability Questionnaire (PDQ) 15 item tool to measure disability related to physical pain (lower scores are "better" results)
- Beck Depression Inventory (BDI) 21 item tool to measure physical, physiological and cognitive aspects of depression (lower scores are "better" results)
- Beck Anxiety Inventory (BAI) 21 item tool to measure physical, physiological and cognitive aspects of anxiety (lower scores are "better" results) Community Integration Questionnaire (CIQ) – 15 item tool to measure engagement in home, socialization and productivity activities (higher scores are "better"
- Return-to-Work Self-Efficacy Questionnaire (RTWSE) 19 item tool to quantify an individual's confidence in their ability to manage work demands, communication and requests for modifications and accommodations (higher scores are "better" results)
- Canadian Occupational Performance Measure (COPM) \*COPM forms the framework for the goal setting and evaluation process in MAP.

#### CANADIAN OCCUPATIONAL PERFORMANCE MEASURE (COPM)

❖ 1991 — National Health Research Development Program and the Canadian Occupational Therapy

Multi-disciplinary use in 40 countries, 36 languages, 500+ scholarly articles

Demonstrated reliability, responsiveness, validity

❖Not diagnosis specific – measures change in performance and satisfaction over time in areas of self-care, productivity and leisure

\*Self-determination reinforces self-efficacy\*

### **CASE STUDIES**

#### CASE STUDY #1: "M"

- 36 years old
- Major depression diagnosis Length of disability prior to referral: 8 months
- Goals: morning routine, cooking, reading, fitness

  - No physical challenges or barriers to RTW
  - Increased self-efficacy over duration of MAP GRTW of 9 weeks, 3 months post-MAP with sustained RTW
- Sustained full time RTW at 6 months post-MAP; M provided feedback that MAP was a crucial aspect of her RTW preparation in rebuilding routines and confidence; confirmed maintenance or further increased success in COPM goal areas of morning routine, cooking and reading at 6 months post-MAP.

"(She) has created habits of her goals and recognizes the contribution to her confidence and self-efficacy."

#### CASE STUDY #2: "A"

- Diagnoses of depression and anxiety; social challenges / family issues
- Length of disability prior to referral: 26 months
- Goals: sleep routine, review of professional materials, "important stuff", job search activities
- No physical diagnoses, but perceived pain issues
- Concurrent counselling and job search supports
- \* RTW on part time basis at conclusion of MAP, with previous employer; working full time at 6 month follow up
- Post-program feedback session was profoundly impactful

"(I am a) work in progress... (I have) bits of time for bits of joy."

#### CASE STUDY #3: "C"

- Left workforce due to workplace conflict; informal diagnoses of anxiety, depression and substance misuse
- Length of disability prior to referral: 3 months
- Goals: self-care, career exploration, hobbies, fitness
  - No physical or (diagnosed) mental health challenges
  - Lack of confidence, poor self-efficacy at outset
  - Consistent use of Participant Workbook participant independently purchased additional resources related to workbook activities; strong sense of accountability and maximization of MAP

  - 💠 Use of RIASEC Inventory to explore alternative vocational options, discussion with spouse job search activities contributed to full time

#### CASE STUDIES #4 & #5: (admittedly, not all participants are successful)

Diagnoses of anxiety and depression

Length of absence from workplace: 4 months

health symptoms and need for additional medical assessment and

Unable to proceed after two sessions due to increasing mental

❖Diagnosis of chronic fatigue syndrome

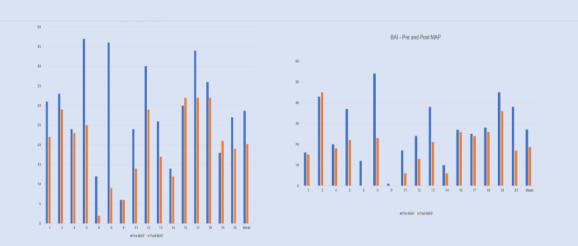
❖Length of absence from workplace: 6 months ❖Withdrew from MAP after initial session as participant did not

anticipate any value in engaging in program, strong disability mindset and felt referral was coercion on part of insurer

#### **SUMMARY OF MAP DATA**

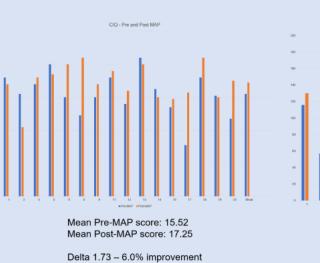
- Anecdotal / subjective feedback has been overwhelmingly positive from participants and referra
- The following slides show summative data from the first 16 participants, as well as statistical analysis (using SPSS software) for the first 14 complete data sets.

\*Gains and improvements over the course of MAP participation have been determined to be statistically significant.\*



Mean Pre-MAP score: 28.63 Mean Post-MAP score: 20.25 Delta 8.38 - 13.3% improvement

Mean Pre-MAP score: 27.19 Mean Post-MAP score: 18.63 Delta 8.56 - 13.6% improvement



(\*Covid restrictions are believed to

be impacting this data collection

Mean Pre-MAP score: 82.5 Mean Post-MAP score: 101.13



Mean Post-MAP score: 5.9 Delta 2.4 - 24% improvement

Mean Pre-MAP score: 3.5

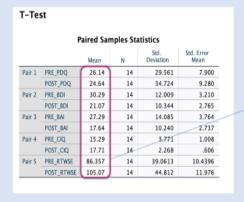
Delta 2.4 – 24% improvement

Mean Pre-MAP score: 3.6

Mean Post-MAP score: 6.0

Delta 18.63 - 9.8% improvement

### STATISTICAL ANALYSIS



-4.386

Pair 2 PRE\_BDI - POST\_BDI

Pair 3 PRE\_BAI - POST\_BAI

Pair 4 PRE\_CIQ - POST\_CIQ

\* Change in mean scores: Pre-program score minus Postie. an average decrease of 9.2 on BDI scores, an average

> A two-tailed significance test demonstrates significance where the p-value is less than 0.05.

decrease of 9.6 on BAI scores, an average increase of 18.7 on

\* Mean scores for all data collection tools show improvements

ie. PDQ, BDI and BAI scores have decreased (ie. less pain, less

indication of depression, less indication of anxiety) and CIQ and

RTWSE scores have increased (ie. more home and community

engagement, more self-efficacy of capacity to return to work).

\* Four of the five data collection measures have demonstrated very strong statistical significance.

It is hypothesized that the PDQ has not demonstrated significance, as most participants (to date) have not had substantial pain

### HOW IS **MAP** DIFFERENT FROM **PGAP**?

Criteria	MAP	PGAP		
Duration	4- or 6-week program options *More cost effective*	10 weeks		
Emphasis	Increasing functional abilities through cumulative goal achievement (increase positive results)	Decreasing chronic disability; psychosocial risk- targeted intervention to reduce work disability (decrease negative results)		
Target population	Individuals who are experiencing performance challenges in activities they want to do, need to do, or are expected to do	Individuals with delayed recovery from chronic conditions — primarily chronic pain and mental health diagnoses		
Assumptions	<u>Self-efficacy</u> is the key cognitive component in enabling individuals to overcome challenges and return to work and/or avocational activities	<u>Psychosocial risk factors</u> impact recovery, including catastrophizing, beliefs of injustice, self-defeating mindset		

### Why choose MAP?

- Active and engaged goal setting process using COPM
- Individualized goals this is not a "cookie cutter" program
- Accountability weekly sessions provide feedback, encouragement and planning for sequential progress of goals
- Functional gains that can be tied to pre-requisite / transferable skills for return-to-work success • Self-reported performance and satisfaction in personalized goal areas has demonstrated a mean improvement of 24% -
- strongly motivating and objective actualization of self-efficacy
- Statistical significance has been demonstrated on four of the measurement tools.

Contact Information: Tracey Kibble - 902-449-0110 tkibble@metricsvocational.ca www.metricsvocational.ca

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- To support those who have experienced accidents, illness and injuries to promote their activation/reactivation, and functional restoration
- MAP was developed through evidence-based, best-practices from 50+ peer reviewed global journal articles and research findings.
- Decrease STD/LTD claim costs, increase engagement, increase return to work success
- Early intervention is an evidence-based demonstrated factor for success.

### WHAT IS PROVIDED?

4- or 6-week program - one session per week

Remote service: telephone or virtual delivery

Participant Workbook provided

Baseline data collection, post-program data collection

Initial Report (after session 1),
Final Report (after session 4 or 6)

Follow up at 6- and 12months post-program

### KEY COMPONENTS OF MAP

- Self-efficacy (mastery experiences, verbal persuasion/self-talk, modeling, reinterpretation of symptoms)
  - \* Motivational interviewing (open ended questions, reflective listening, summarizing, ffirming, eliciting self-motivation)
    - **Goal setting** (approach vs avoidance, performance vs mastery, difficult vs easy goals, SMART goals)

### WHO IS APPROPRIATE FOR MAP?

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- Physical injuries
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<sup>\*\*</sup> Early intervention is ideal, but those who have transitioned to LTD have also demonstrated benefits from participation in MAP to re-establish functional success.

## WHO IS NOT APPROPRIATE FOR MAP?

- Individuals who are not medically stable
- ❖ Individuals who are unable to consistently engage in 60 − 90-minute sessions
   (initial session is typically 90 minutes in length, subsequent sessions are approximately 60 minutes in length)
- Individuals who are not able or willing to engage in the goal setting process and/or are unwilling to put forth legitimate effort to make progress

### DATA COLLECTION:

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"(She) has created habits of her goals and recognizes the contribution to her confidence and self-efficacy."

### CASE STUDY #2: "A"

- ❖ 58 years old
- Diagnoses of depression and anxiety; social challenges / family issues
- Length of disability prior to referral: 26 months
- Goals: sleep routine, review of professional materials, "important stuff", job search activities

- No physical diagnoses, but perceived pain issues
- Concurrent counselling and job search supports
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- Post-program feedback session was profoundly impactful

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### CASE STUDY #3: "C"

- 52 years old
- Left workforce due to workplace conflict; informal diagnoses of anxiety, depression and substance misuse
- Length of disability prior to referral: 3 months
- Goals: self-care, career exploration, hobbies, fitness

- No physical or (diagnosed) mental health challenges
- Lack of confidence, poor self-efficacy at outset
- Consistent use of Participant Workbook participant independently purchased additional resources related to workbook activities; strong sense of accountability and maximization of MAP
- ❖ Use of RIASEC Inventory to explore alternative vocational options, discussion with spouse − job search activities contributed to full time employment in 4<sup>th</sup> week of MAP

### **CASE STUDIES #4 & #5:**

(admittedly, not all participants are successful)

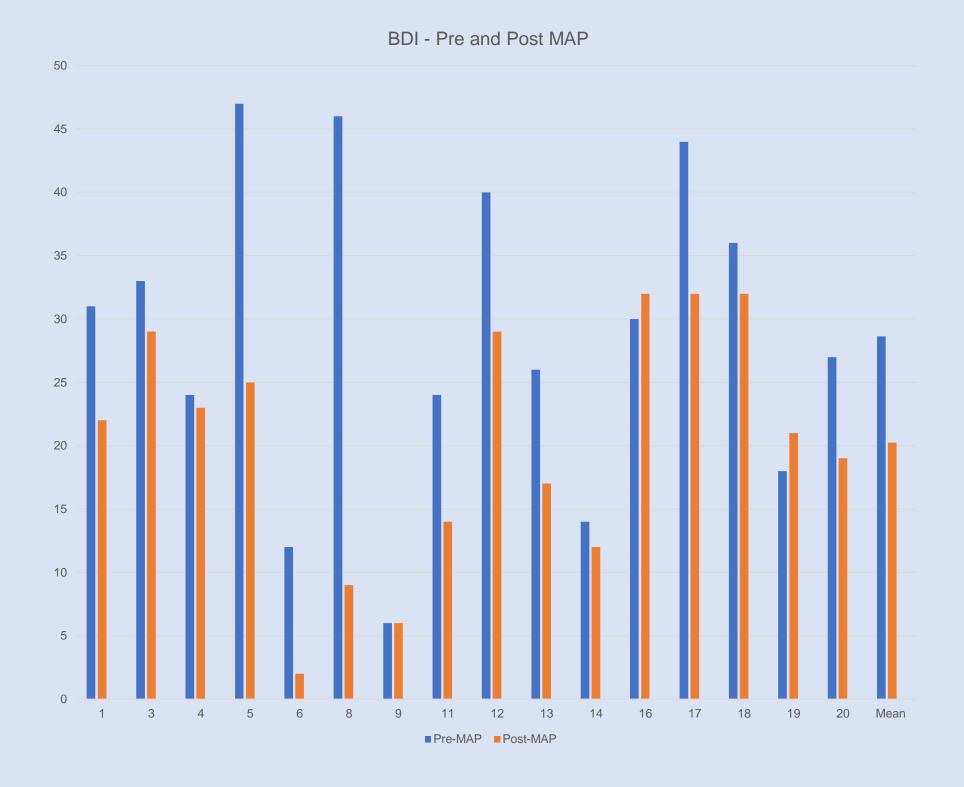
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- Diagnoses of anxiety and depression
- Length of absence from workplace: 4 months
- Unable to proceed after two sessions due to increasing mental health symptoms and need for additional medical assessment and treatment

- ❖"L" 45 years old
- Diagnosis of chronic fatigue syndrome
- Length of absence from workplace: 6 months
- Withdrew from MAP after initial session as participant did not anticipate any value in engaging in program, strong disability mindset and felt referral was coercion on part of insurer

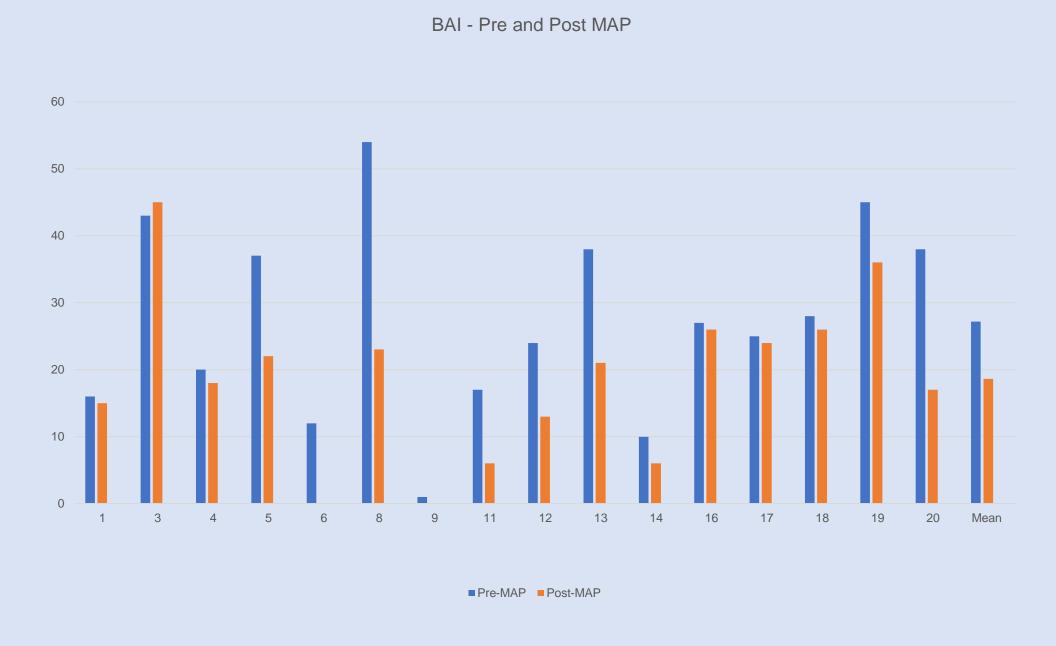
- Anecdotal / subjective feedback has been overwhelmingly positive from participants and referral sources.
- MAP demonstrates objective success via pre- and post-program data collection.
- The following slides show summative data from the first 16 participants, as well as statistical analysis (using SPSS software) for the first 14 complete data sets.

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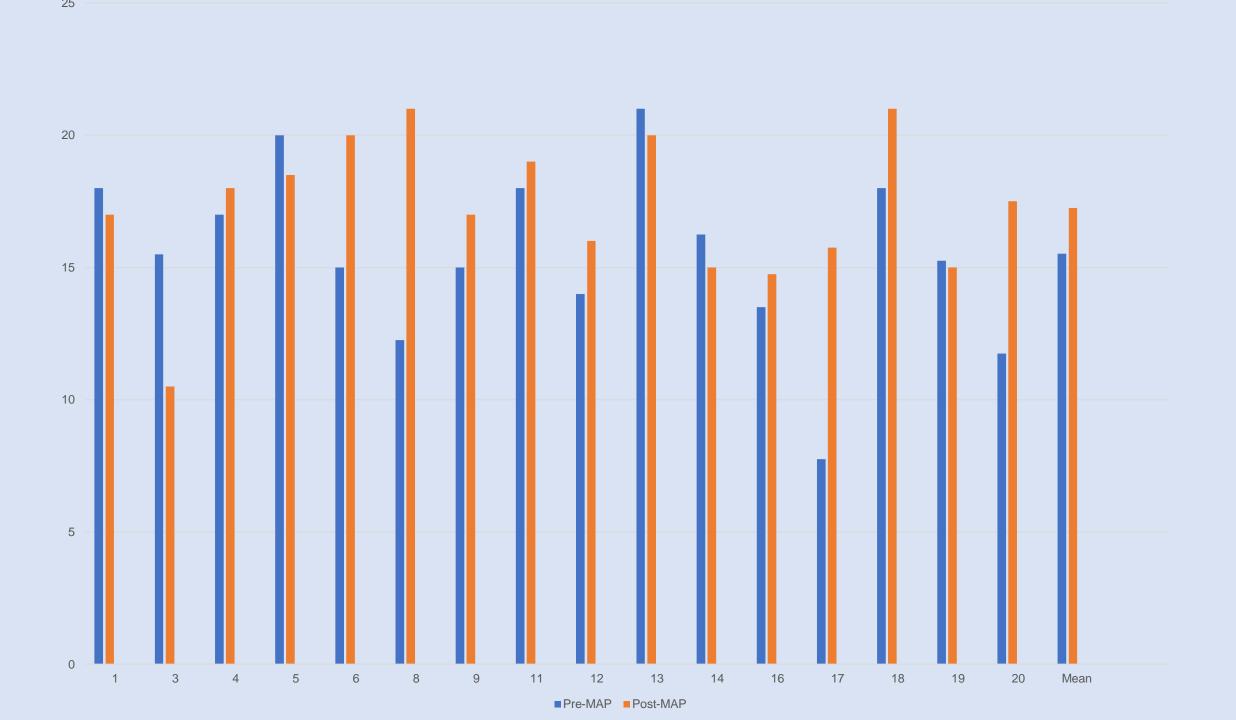
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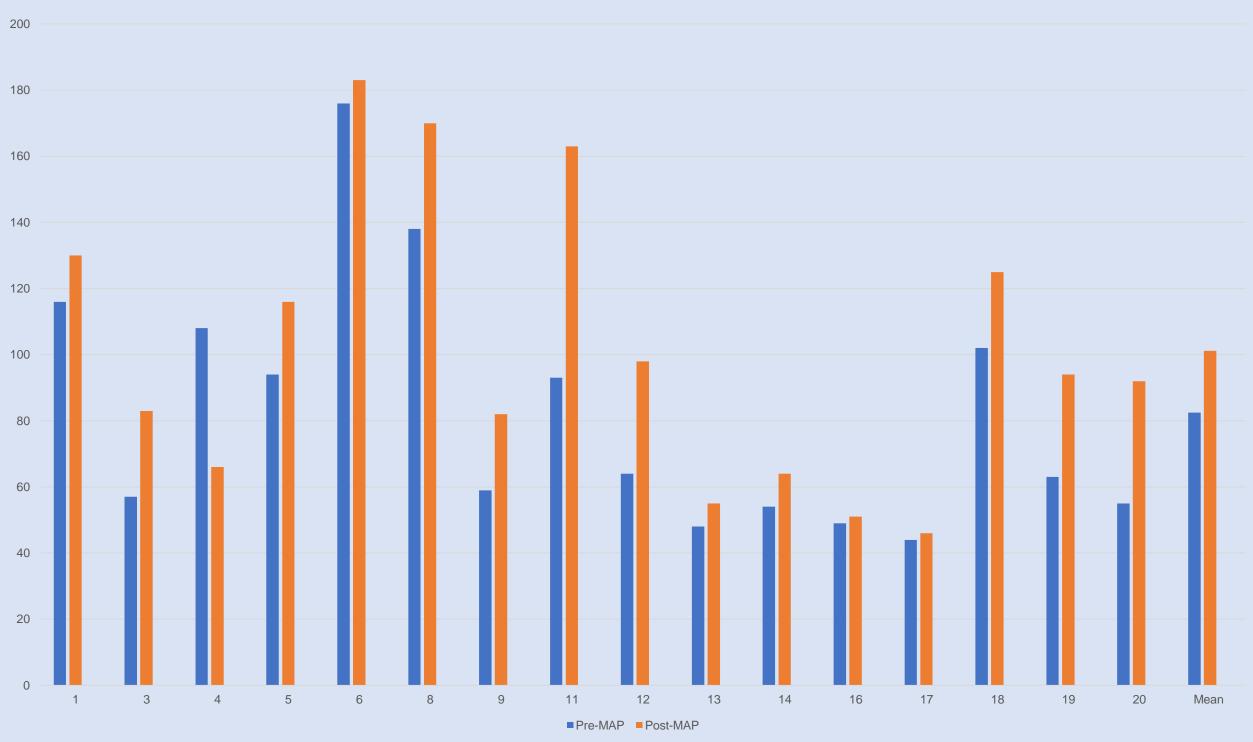
Delta 8.56 – 13.6% improvement



CIQ - Pre and Post MAP

Mean Pre-MAP score: 15.52 Mean Post-MAP score: 17.25

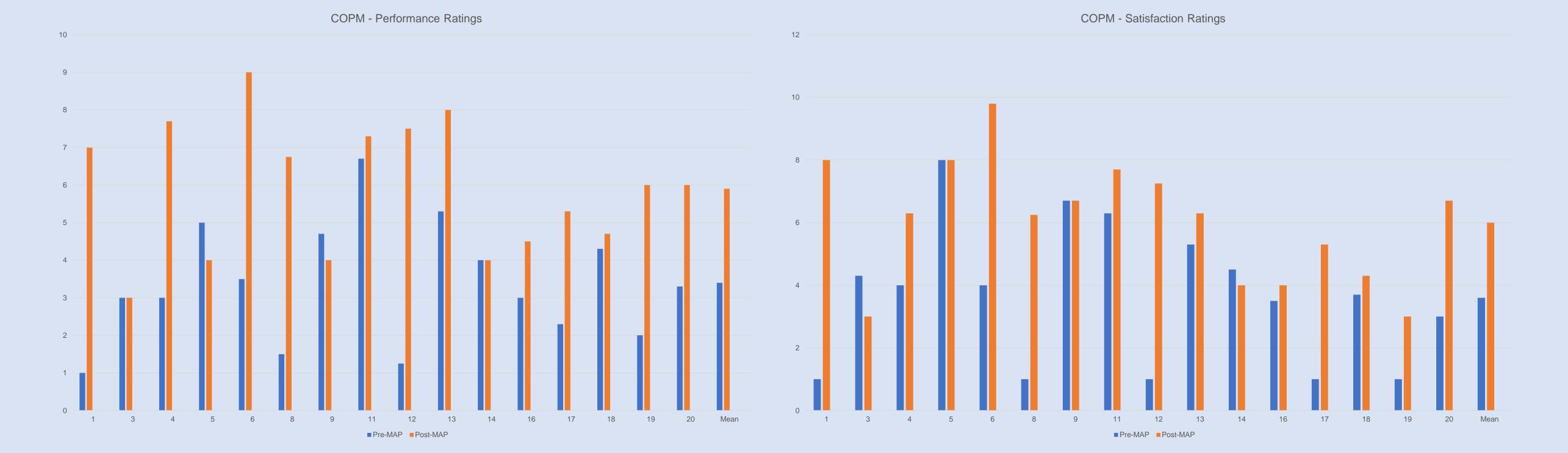
Delta 1.73 – 6.0% improvement (\*Covid restrictions are believed to be impacting this data collection measure.\*)



RTWSE - Pre and Post MAP

Mean Pre-MAP score: 82.5 Mean Post-MAP score: 101.13

Delta 18.63 – 9.8% improvement



Mean Pre-MAP score: 3.5 Mean Post-MAP score: 5.9

Delta 2.4 – 24% improvement

Mean Pre-MAP score: 3.6 Mean Post-MAP score: 6.0

Delta 2.4 – 24% improvement

### T-Test

### **Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE_PDQ	26.14	14	29.561	7.900
	POST_PDQ	24.64	14	34.724	9.280
Pair 2	PRE_BDI	30.29	14	12.009	3.210
	POST_BDI	21.07	14	10.344	2.765
Pair 3	PRE_BAI	27.29	14	14.085	3.764
	POST_BAI	17.64	14	10.240	2.737
Pair 4	PRE_CIQ	15.29	14	3.771	1.008
	POST_CIQ	17.71	14	2.268	.606
Pair 5	PRE_RTWSE	86.357	14	39.0613	10.4396
	POST_RTWSE	105.07	14	44.812	11.976

### **Paired Samples Test**

Paired Differenc	es		
	95% Confident the Diff		
Std. Error	the Diff	erence	

			Std.	Std. Error	the Diff	ference			Sig.	(2-	
		Mean	Deviation	Mean	Lower	Upper	t	df		ed)	
Pair 1	PRE_PDQ - POST_PDQ	1.500	17.723	4.737	-8.733	11.733	.317	13		.757	
Pair 2	PRE_BDI - POST_BDI	9.214	10.304	2.754	3.265	15.164	3.346	13		.005	
Pair 3	PRE_BAI - POST_BAI	9.643	9.170	2.451	4.348	14.938	3.934	13		.002	
Pair 4	PRE_CIQ - POST_CIQ	-2.429	3.390	.906	-4.386	471	-2.680	13		.019	-
Pair 5	PRE_RTWSE - POST_RTWSE	-18.7143	24.9844	6.6774	-33.1398	-4.2887	-2.803	13		.015	

- \* Mean scores for all data collection tools show improvements
- ie. PDQ, BDI and BAI scores have decreased (ie. less pain, less indication of depression, less indication of anxiety) and CIQ and RTWSE scores have increased (ie. more home and community engagement, more self-efficacy of capacity to return to work).
- \* Change in mean scores: Pre-program score minus Post-program score
- ie. an average decrease of 9.2 on BDI scores, an average decrease of 9.6 on BAI scores, an average increase of 18.7 on RTWSE scores.

A two-tailed significance test demonstrates significance where the p-value is less than 0.05.

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