InSHAPE Implementation and Outcomes
Introductions

**Host Presenters:**

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**Guest Presenter:**

Kenneth Jue, MSSA, Ken Jue Consulting
Video

InSHAPE®
Shaping the future of mental health™
In FY 2012, SCCCMH implemented the InSHAPE program, a SAMHSA Evidence-Based Practice (EBP).

SCCCMH implemented this program to extend its range of effective services promoting psychiatric Recovery for persons with Severe Mental Illness (SMI).

Start-up funds provided by a program implemented Grant.
Program Design

- Months 1-3 meet 2x a week
- Months 4-6 meet 1x a week
- Months 7-9 meet 1x every other week
- Months 10-12 meet once a month

Designed to progress the participants to incorporate a healthy lifestyle on their own.
Program Design

- Initial Fitness Assessment, with retesting at their 3, 6, 9 and 12 month appointment.

- Health questions are asked Weekly and Monthly.

- Physical Activity and Nutrition Logs are reviewed weekly.

- Physical and Nutrition Goals are developed weekly.
Group Workout Classes

- Walking groups: the mall, outdoor walking trails, YMCA.
- Open workout hours at the YMCA.
- Water Aerobics at the YMCA.
- Fun Fridays!
Nutrition Classes

- Shopping on a Budget
- Healthy Choices
- Food and Mood
- Eating Balanced Meals
- Super Snacks
- Sugar & Sodium
Nutrition Classes

- Eat This....
- Not That...
Going to the YMCA…

- Presently 12 out of our 15 current InSHAPE members work out at the YMCA in Port Huron.

- Favored activities available at the YMCA are Water Aerobics, Zumba and Yoga.

- InSHAPE Graduates also utilize the YMCA. Ten (10) out of 19 Graduates (53%) continue to work out independently.
Port Huron CMH

- Started the Program in 2012
- Total Weight Loss: 769 lbs. (78 participants)
- Total Inches Loss: 283 (23.83 feet)
- Current Participants: 15
- Graduated Participants: 19
Marine City CMH

- Started the Program in April 2014
- Total Weight Loss: 122 lbs.
- Total Inches Loss: 22.5
- Current Participants: 6
- Graduated Participants: 0

Groups:
- Walking the trail at the park
- Circuit Class at CMH
- Nutrition Class once a month
Capac CMH

- Started the Program in October 2014
- Total Weight Loss: 14 lbs.
- Total Inches Loss: N/A
- Current Participants: 3
- Graduated Participants: 0
- New Facility will be open in Spring of 2015
InSHAPE embodies core elements of Michigan’s 4x4 Plan:

- Healthy diet
- Regular exercise
- Annual physical examination
- Avoid all tobacco use.

InSHAPE encourages awareness of the four key health measures closely tied to chronic disease:

- Body Mass Index (BMI)
- Blood pressure
- Cholesterol level
- Blood sugar level
Key Program Outcomes

Key personal health and wellness outcomes assessed at program:

a) Weight change (favorable loss)
b) Blood Pressure (favorable decrease)
c) Body proportion (favorable decrease in inches – waist and hips)
d) Flexibility (increase)
e) Cardiovascular capacity (increase)
Key Program Outcomes

InSHAPE also has been shown to promote key healthy life-style choices for such varied populations:

a) Avoidance of alcohol, tobacco and illicit drugs
b) Increase in physical activity and exercise
c) Healthy eating
d) Improved sleep hygiene
e) Improved stress management
Outcomes – Findings

Method
- All program (Port Huron) participants (N=74) were initially identified for this initial program outcomes evaluation.
- Those with a Service Length-Of-Stay (LOS) of less than 3 months (n=42) were not included in the data set. Thus, thirty-two (32) participants were available for evaluation.
- This available group comprised forty-three percent (43%) of the initial group.
- It was anticipated that a) favorable service outcomes are linked to program participation, and b) such favorable service outcomes are more likely achieved per longer service LOS.
Outcomes – Findings

Results
Program participants were sub-grouped according to service LOS: 3 months / 6 months / 9 months, and (12-month) Graduates.

3 months subgroup (n = 6)
6 months subgroup (n = 4)
9 months subgroup (n = 3)
Graduates subgroup (n = 19)

The Graduate sub-group, comprised of nineteen (19) participants, which was fifty-nine percent (59%) of the total.
Outcomes – Findings

Limitations of the group comparisons:

- Findings are based on sub-groups per service LOS, and accordingly such clustering did not necessarily control for other participant characteristics (e.g. initial body weight, initial blood pressure, number of participants per sub-group, etc.).

- Participant involvement with the InSHAPE staff varied across sub-group, strategically thinning the density of contacts through the service LOS: 3 month subgroup (two contacts per week), 6 month subgroup (one contact per week), 9 month subgroup (one contact every-other-week), Graduate contact (one contact per month).
Outcomes – Weight Loss & BP

Average Weight Loss (pounds)

BP Decreasing Toward Normal Range (percent of participants)
Outcomes – Waist & Hip

Average Decrease in Hips (inches)
- 3 Month (6)
- 6 Month (4)
- 9 Month (3)
- Grads (19)

Average Decrease in Waist (inches)
- 3 Month (6)
- 6 Month (4)
- 9 Month (3)
- Grads (19)
Outcomes – Flexibility & Walking

Average Gain in Flexibility
(inches)

Average Increase in Distance Walked
(feet)
Psychiatric Inpatient Utilization

- Identified and compared ‘high participation’ (Graduate) and ‘low participation’ (<3 months) subgroups
- Analyzed pre-program and post-program IP utilization (Admissions, Days)
- Findings generally reveal within-group decreases in IP utilization but do not support the expectation that decreased psychiatric IP utilization rates are essentially linked increased service LOS
- Subject characteristics within each subgroup potentially may be identified and linked to Psychiatric IP utilization

<table>
<thead>
<tr>
<th></th>
<th>Up to 3 Months In-Shape Participation (N=30) (IP n = 6)</th>
<th>Graduate In-Shape Participation (N=19) (IP n = 4)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Program</td>
<td>Post-Program</td>
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<tr>
<td>Number of Admissions*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>5</td>
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<tr>
<td>Number of Days*</td>
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<td>76</td>
</tr>
</tbody>
</table>

*includes recidivism
Hospitalization numbers regarding IP Admissions, X² (1) = 0.5573, p > .05 ns; IP Days, X² (1) = 0.4074, p > .05 ns
Summary

- The Graduate subgroup achieved most-favorable results in two physical health outcomes, only, which is the same number of ‘most-favorable’ results achieved by both the 6 Month sub-group and the 9 Month sub-group. However, it should also be noted that the total number of participants in the ‘graduate’ sub-group (n=19) comprised almost three times the number of participants in the 6 Month and 9 Month sub-groups, combined (n=7).

- Unexpected IP utilization findings may be linked to unknown subject characteristics and accordingly remain as an area for further study.
Other Outcomes BP & Smoking

Blood Pressure
Among those who have been identified (N = 18) with high blood pressure, nine (9) individuals have achieved a significant improvement.

Smoking
Among those who have been identified (N = 29) as smokers, six (6) individuals report having decreased the number of cigarettes they smoke each day.
Other Outcomes
Sleep

In terms of average number of hours slept a night:
- Fourteen (14) individuals have reported sleeping longer during the night
- Nineteen (19) individuals have reported waking up fewer times during the night

In terms of sleep onset issues, “How many days this past week have you had a hard time falling asleep?” eighteen (18) individuals have reported significant improvement:
- Fifteen (15) have reported no longer experiencing delayed sleep
- Three (3) have reported delayed sleep improvement nightly to only one or two nights per week.
Other Outcomes
Depression

Outcomes - Depression
‘Global Measure’ at Admission and at Discharge (LOS 4 – 12 months)

<table>
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<tr>
<th>Parameter</th>
<th>Value – Admission</th>
<th>Value – Discharge</th>
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<tbody>
<tr>
<td>Mean</td>
<td>5.781</td>
<td>2.63</td>
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<tr>
<td>SD</td>
<td>1.871</td>
<td>1.54</td>
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<tr>
<td>N</td>
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<tr>
<td>Minimum</td>
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<td>1</td>
</tr>
<tr>
<td>Median</td>
<td>5.5</td>
<td>3</td>
</tr>
<tr>
<td>Maximum</td>
<td>8</td>
<td>5</td>
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</tbody>
</table>
Participant Feedback

- “The InSHAPE program started me on the right path and educated me in eating healthy…”

- “It helps to motivate me and I feel I have never been this motivated to do anything in my life. This program is one of the best things that has ever happened to me.”

- “An apple a day keeps the bipolar away”

- “The struggle makes you stronger”
Participant Feedback

- “...my physical health has gone up...I’m running longer times, being better at the walking test, and my resting heart rate has gone down.”

- “It has gotten me out doing something instead of sleeping.”

- “I’ve been trying to lose weight for over 3 years now on my own...once I started the program my weight loss took off.”

- “Helped me get out of my life...makes me feel better; Helps to get me out of my shell...”
Nate’s Experience

Nathan
Moving Forward

- Address initial and continuing challenges to program engagement and retention.

- Consider extending the density of weekly/monthly program contacts for the longer LOS sub-groups, given apparent challenges to their continuing and generalizing program progress.
Moving Forward

- Re-engage program Graduates into booster contacts to refresh and revitalize prior program progress, and / or to access them as peer mentors serving new program participants.

- Expand program outcomes tracking, including self-report information regarding healthy life-style choices such as: a) Avoidance of alcohol, tobacco and illicit drugs, b) Increased physical activity and exercise, c) Healthy eating habits, d) Stress management.

- Expand the program to individuals with Intellectual/Developmental Disabilities (I/DD).
InSHAPE® Research Findings

- Initial qualitative study (6/2008): small sample of successful participants identified the critical role of Health Mentors in their success with individualized interventions, supportive encouragement by Health Mentors and associated increased self-confidence.

- Initial pilot study (12/2009), participants increased their levels of exercise, walking, etc. over 9 months, and reduced waist circumference (hip to waist ratio) which suggests weight distribution and improved muscle mass.

- Recently (1/2015), 3 very successful female participants also attributed their success to the pivotal role of Health Mentors.

- Current studies: CMS funded 2012 implementation study across NH and NIH funded very recent national implementation study.
Lessons Learned

- Health Mentors should not cross over into other roles, such as case management, but maintain health promotion focus.
- InSHAPE® is about educating and supporting the participants in making very difficult lifestyle changes. It not only takes commitment, but also courage.
- Not everyone around us will be supportive of the changes we wish to make in our lives.
- Health Mentors need and deserve continuous support to demonstrate patience, persistence, respect, acceptance and encouraging stance toward their clientele.
- Clinical cardio-vascular health improvements can occur with and without accompanying significant weight loss.

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More Lessons

- 6 months is not sufficient for most participants to sustain their progress over time; 1 year seems to be the minimum timeframe.
- Medication side-effects can frustrate and discourage participants; thus, it helps Health Mentors to have basic understanding of meds.
- Fear of failure is a powerful negative factor for participants to overcome.
- Before weight loss can happen for many, increased flexibility, range of motion and balance must come first.
- Factors for individual success: individual readiness, determination, support, track progress, mentoring, hope, Recovery vision
- Clear expectations
- Small doses of success early and often
- Reflective listening and self-management

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Lessons Learned - Community

- Communities can and do demonstrate acceptance of our participants and an interest in mental illness/mental health.
- For-profit community facilities can also be willing and effective partners and helpers.
- Community engagement and partnerships are about relationships
- Requires trust, time, nurturance and effort
- In SHAPE is an instrument that can move your organization deeper into the community and your community deeper into your organization

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Questions/Answers

Thank You