



**Lifestyle Medicine
6 Pillars of Health**

EMPOWERING PATIENTS: ENHANCING PATIENT-CENTERED CARE THROUGH LIFESTYLE MEDICINE PROGRAMS

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BACKGROUND

- **Health Challenges:** The communities served by Marathon Family Health Team (MFHT) face higher rates of chronic diseases and poorer health outcomes compared to provincial averages. These challenges are linked to factors like reduced physical activity, inadequate nutrition, and higher rates of tobacco and alcohol use, making lifestyle interventions crucial.
- **Socioeconomic Disparities:** Significant local income disparities highlight the need for targeted support to address the social determinants of health, which lifestyle medicine can help tackle through its focus on enhancing overall health and well-being.
- **Health Promotion Success:** MFHT has a strong track record with health promotion programs and initiatives, making lifestyle medicine a natural extension to further improve community health and well-being.
- **Growing Demand:** Ongoing economic development and a shifting demographic, including a growing aging population, are expected to increase the demand for local healthcare services, reinforcing the relevance of a lifestyle medicine approach.

WHAT IS LIFESTYLE MEDICINE?

- **Lifestyle Medicine:** A scientific approach demonstrating that healthy living acts like medicine for the body.
- **Core Concept:** Effective, easy to understand, and brings only positive results. Promotes active patient participation and a patient-centred approach.
- **Focus:** Uses evidence-based approaches that support behaviour change to improve patient health outcomes.
- **Key Pillars of Health:** Nutrition, physical activity, sleep, stress management, avoiding risky substances, and social connections.
- **Purpose:** Prevent, treat, manage, and even reverse diseases, by replacing unhealthy behaviours with positive ones.
- **Chronic Diseases Addressed:** Includes heart disease, hypertension, stroke, obesity, type 2 diabetes, osteoporosis, and many cancers.
- **Approach:** Targets the root causes of diseases by promoting healthy lifestyle choices, rather than just treating symptoms.

LIFESTYLE MEDICINE AT MFHT

- **Program Development:** MFHT created a Lifestyle Medicine Program by adapting principles from the American College of Lifestyle Medicine (ACLM) to meet our community's specific needs.
 - **Development Process:** A small working group, consisting of Health Promoters/RKins, Social Worker, Family Physician, and an operational lead, dedicated 10 months to developing the program.
 - **Pilot Project:** To evaluate and refine the program, MFHT launched an 8-month pilot project, running from January to August 2023, to gather feedback and make necessary adjustments.
 - **Lifestyle Medicine Coach:** A part-time Lifestyle Medicine Coach was hired on a one-year contract to implement the program.
 - **Certification:** Prior to the pilot, the Lifestyle Medicine Coach completed a "Coaching in Healthcare" certification through the University of Alberta/Thought Architects (October to November 2022).
 - **Program Structure:** The program included intake, health pillar, check-in, and discharge appointments. Additionally, group check-ins and education sessions were offered (see algorithm).
 - **Patient-Centered Approach:** The program offered flexibility by allowing patients to choose the order of pillar appointments based on their priorities. Patients set their own goals with support from the coach and had the option to participate in either in-person or virtual group sessions, where applicable.

PILOT PROGRAM DETAILS & PARTICIPATION

- **Program Duration:** January 24, 2023 – August 30, 2023
- **Participant Overview:**
 - **Completed Registration:** 23
 - **Completed Program:** 17
 - **Demographics:** 13 women, 4 men
 - **Age Range:** 29-74
 - **Referral Sources:** 6 provider referrals, 11 self-referrals
- **Program Engagement:**
 - **Appointments:** All participants completed 6 in-person, one-on-one pillar appointments.
 - Total Intake/Pillar/Discharge Appointments: 139
 - **Check-Ins:** Participants had opportunity to check in with their coach between appointments.
 - Check-In Methods:
 - In-Person: 9
 - Email: 74
 - Phone: 24
 - Total Check-Ins: 107
- **Referrals to Other Providers:**
 - 1 to Registered Kinesiologist (exercise coaching)
 - 1 to Registered Social Worker (general social work)
 - 1 to Physician (weight management)

PILOT PROJECT EVALUATION

- The 8-month Lifestyle Medicine pilot program was evaluated through participant surveys:
- **Quantitative health assessment:** Participants completed a modified ACLM assessment using validated tools for each health pillar at the start and end of the program. This allowed for an initial evaluation of perceived health and baseline measurements, with comparisons made post-program to identify changes.
 - **Quantitative behavior and knowledge assessment:** Post-program survey data were compared with pre-program results to evaluate changes in participants' understanding of the health pillars, their confidence in making lifestyle changes, and their perceived feasibility of implementing these changes.
 - **Qualitative and quantitative feedback:** Participants provided feedback upon discharge to gauge their satisfaction with the program and the support provided by the Lifestyle Medicine Coach.

RESULTS/FINDINGS

Improvements (see Tables 1 & 2 for details):

- **Current Health Rating:** Increased from 5.9/10 pre-program to 7.5/10 post-program.
- **Knowledge of Health Pillars:** Increased from 6.7 to 8.2.
- **Confidence to Make Changes:** Increased from 6.9 to 7.9.
- **Feasibility of Making Changes:** Increased from 7.7 to 8.1.
- **Overall Improvement:** Ranged from 5% to 16% in all areas except loneliness, which remained unchanged.

Participant feedback:

- **Reasons for Joining:** Improve health, manage stress, gain knowledge, and receive support and accountability.
- **Impact:** Most participants achieved goals or gained valuable insights, with increased awareness and mindfulness. Challenges included maintaining motivation, balancing goals with work/life, and life events.
- **What Worked:** Personalized coaching, flexible scheduling, non-judgmental support, and group sessions for shared learning.
- **Education Value:** Average rating of 4.6/5 for the value of education provided in health pillar appointments.
- **Coaching:** Rated highly for knowledge, support, and tailoring to individual needs. Participants felt comfortable discussing challenges, receiving valuable insights.

Limitations

- **Time Constraints:** Some patients wanted more time to complete health pillar appointments.
- **Group Sessions:** Scheduling conflicts made it difficult for everyone to attend group sessions.
- **Coach Availability:** Part-time coach hours limited appointment scheduling for some patients.

Table 1

Pillar of Health	Knowledge of Pillar		Confidence to Make Change		Feasibility of Making Change	
	Pre-Program Score	Post-Program Score	Pre-Program Score	Post-Program Score	Pre-Program Score	Post-Program Score
Nutrition	6.4/10	8.1/10	6.6/10	7.6/10	8.2/10	7.8/10
Physical Activity	6.8/10	8.1/10	6.7/10	8.1/10	8/10	7.9/10
Stress Management	5.6/10	7.9/10	6/10	6.7/10	6.9/10	7.6/10
Sleep Health	6.6/10	8.1/10	6.8/10	7.6/10	7.6/10	8.2/10
Avoiding Risky Substance	8.1/10	8.9/10	8.8/10	9.5/10	9/10	9.5/10
Social Connection	6.9/10	8.3/10	6.9/10	8.1/10	6.9/10	8/10

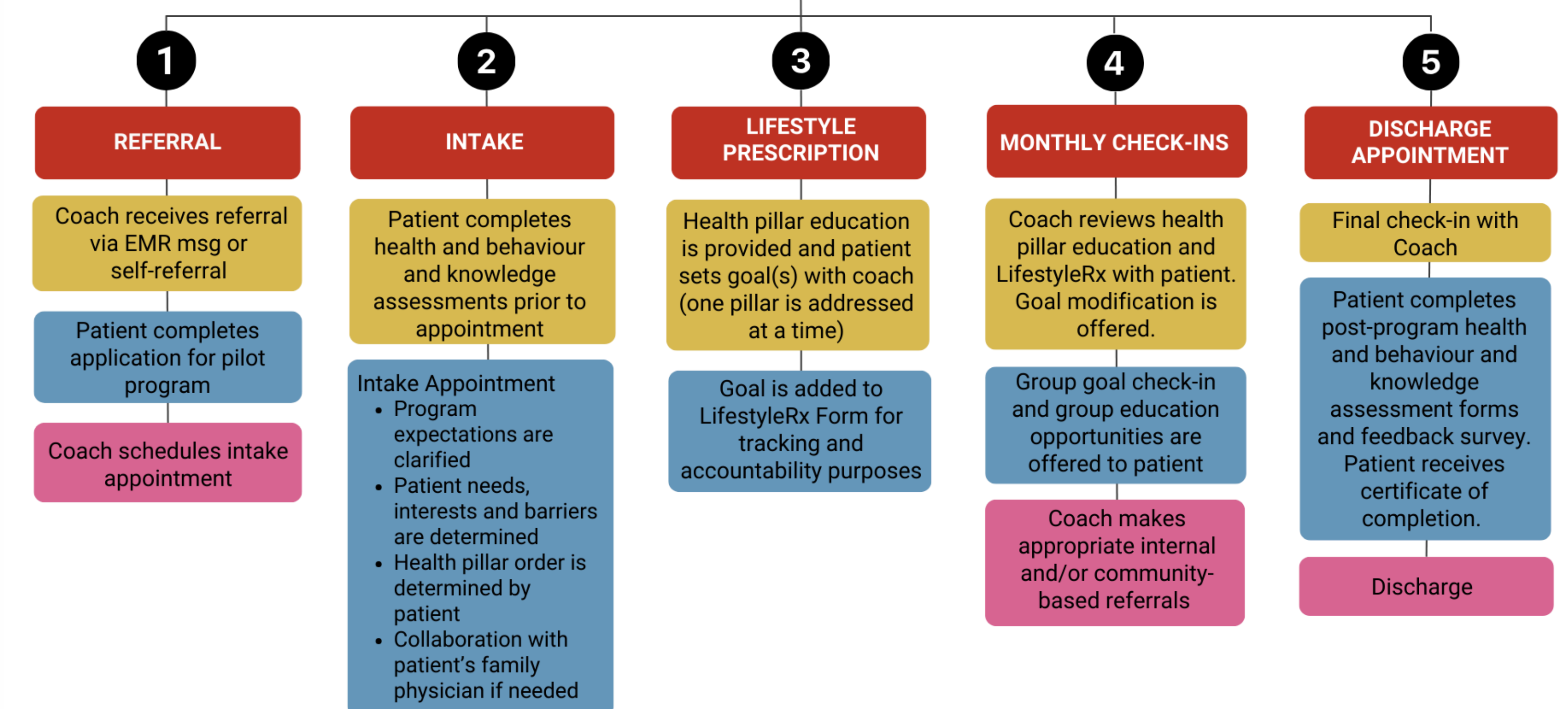
Table 2

Outcome Measure	Average Intake Score	Average Discharge Score	Percent of Improvement
Perceived Rating of Health	5.9/10	7.5/10	16.00%
Pittsburgh Sleep Quality Index	9.65/21	8.53/21	5.00%
Mediterranean Diet Score	3.70/8	4.94/8	15.50%
Exercise Vital Sign (MVPA minutes/week)	74.12	151.18	104%
Perceived Stress Score (PSS-4)	8.12/16	6.47/16	10.40%
Patient Health Questionnaire (PHQ-9)	7.94/27	4.59/27	12.00%
General Anxiety Disorder (GAD-7)	6.18/21	4.76/21	6.76%
Alcohol Use Disorders Identification Test (AUDIT)*	3.18/12	2.53/12	5.42%
De Jong Gierveld Loneliness Score	2.47/6	2.47/6	-

*We only asked Q1-Q3

Testimonial: "The information on each pillar has been invaluable in helping me make changes to adopt a more healthy lifestyle. It not only provided this knowledge but also increased my confidence in making these changes by helping me set goals, reviewing and assessing my progress. The coaching aspect of this program was extremely important to me not only for accountability but for the support & encouragement...."

LIFESTYLE MEDICINE PILOT PROGRAM ALGORITHM



CONCLUSION

- **Feasibility & Efficiency:** The Lifestyle Medicine Program successfully improved participants' health ratings, knowledge, confidence, and feasibility in making lifestyle changes. This demonstrates its effectiveness in providing valuable tools and support for health enhancement.
- **Role of the Lifestyle Medicine Coach:** The certified Lifestyle Medicine Coach was pivotal to the success and sustainability of the program. The coach's involvement in the interdisciplinary care team was essential for effective health behavior change, care coordination, and system navigation, making the program sustainable and impactful.
- **Integration in Interdisciplinary Care Team:** Referring participants to other healthcare providers within the team (e.g., RSW, RKin, physicians) offered essential support for managing complex patient needs, which greatly enhanced the overall effectiveness of the Coach and program.
- **Benefits of Group Sessions:** The inclusion of group check-ins and physician-led education sessions was well-received, indicating that these components could further strengthen future health promotion efforts within Family Health Teams.
- **Patient-Centered Approach:** Participants valued personalized coaching, flexible scheduling, non-judgmental support, and the educational content provided, which significantly contributed to their achievement of goals and improved health awareness.
- **Addressing Local Health Challenges:** The program has shown potential in addressing high rates of chronic diseases and socioeconomic disparities, highlighting the need for targeted lifestyle interventions to improve overall health and well-being.
- **Relevance of Lifestyle Medicine:** The program's success underscores lifestyle medicine's role in proactively managing and preventing chronic diseases through healthy lifestyle choices.