



Preparing an integrated self-management support intervention for people living with schizophrenia: Creating collaborative spaces

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Abstract

Introduction: This article describes the planning and development of a novel self-management support protocol, self-management engaging together (SET) for Health, purposefully designed and embedded within traditional case management services to be accessible to people living with schizophrenia and comorbidities. Drawing on established self-management principles, SET for Health was codesigned by researchers, healthcare providers and clients, to create a practical and meaningful intervention to support the target group to manage their own health and wellness. Decision making is described behind tailoring the self-management innovation to meet the needs of an at risk, disadvantaged group served by tertiary, public health care in Canada.

Method: This integrated knowledge translation (IKT) study used a descriptive approach to document the process of planning and operationalizing the SET for Health intervention as a part of routine care in two community-based teams providing predominantly schizophrenia services. Diffusion of innovations literature informed planning. The setting was strategically prepared for organizational change. A situational assessment and theoretical frameworks identified contextual elements to be addressed. Existing established self-management approaches for mental illness were appraised.

Results: When a review of established approaches revealed incongruence with the aims and context of service delivery, common essential elements were distilled. To facilitate collaborative client-provider self-management conversations and self-management learning opportunities, core components were operationalized by the use of tailored interactive tools. The materials coproduced by clients and providers offered joint reference tools, foundational for capacity-building and recognition of progress.

Conclusion: Planning and developing a model of self-management support for integration into traditional schizophrenia case management services required attention to the complex social ecological nature of the treatment approach and the workplace context. Demonstration of proof of concept is described in a separate paper.

KEYWORDS

integrated knowledge translation (IKT), mental health services, organizational change, programme development, self-management, SET for Health



1 | INTRODUCTION

For people living with schizophrenia (PWS), reduction or prevention of relapses is a common goal. Optimal care relies on patients, at times assisted by family or caregivers, actively managing their health in collaboration with a team of healthcare providers. However, PWS and their families report that they lack preparation, supports for community living, and are insufficiently involved in their care.¹ Families, caregivers and providers are challenged to maintain relationships, and access/provide supports to someone who, as a result of the condition itself, may not believe that they have an illness requiring treatment. Quality practice standards expect accessible, equitable healthcare delivery using recovery-oriented services and supports that promote shared decision making and self-management.^{2,3} Thus, care is about a quality healthcare experience focused beyond disease-based outcomes to address health promotion, well-being and meaningful living with schizophrenia. Despite international pressure to implement self-management support and deliver services within existing resources, little direction is available on how to integrate self-management into care, especially for PWS.

This article describes the process of planning and developing an innovative model of self-management support embedded within a traditional outpatient case management service tailored for PWS, the majority of whom have additional co-occurring conditions. The information gathering and decision making behind tailoring the innovation in the context of meeting the needs of an at risk, disadvantaged group served by tertiary, public health care in Canada represents the focus of this article. The implementation of this novel model of self-management support is described separately in another paper.⁴

1.1 | Self-management support and schizophrenia

Self-management refers to the work of clients actively making decisions and engaging in activities to manage or reduce the impact of health conditions on their daily lives in collaboration with healthcare providers and support networks. Self-management *support* refers to the work of healthcare providers, facilitating clients to develop the knowledge, skills, self-efficacy, resources and supports to live well with chronic health conditions. Delivering self-management support within a recovery-oriented framework involves both a portfolio of tools and techniques that help clients engage in healthy behaviours and a fundamental transformation of the patient-caregiver relationship into a collaborative partnership.⁵

Recovery-oriented services that are person-centred, holistic, and address the diversity of each individual's needs within the context of community living are the standard of practice for delivering mental health services in Canada.¹ Recovery is both a uniquely individual transformational process and an outcome of having a full, meaningful life despite the challenges of living with a chronic mental illness. Recovery is "a deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by the illness. Recovery involves the development of new meaning and purpose in one's life as

one grows beyond the catastrophic effects of mental illness".^{6,p.11} To promote clients' recovery journeys, a recovery-oriented service delivery model emphasizes clients' lived experience, strengths, personal autonomy and providers working with clients in collaborative partnerships. This health-management approach contrasts to traditional practices that rely on healthcare providers to 'fix' or 'solve' problems.

Self-management support represents organizational change for services that primarily employ disease-based models of treatment focused on illness-based care. As illustrated in Table 1, these contrasting approaches prompt actions to implement strategies that target fundamental shifts in client and provider views, roles, routine tasks, therapeutic activities and recovery-oriented outcomes (i.e., self-transformation, redefining relationships with self and taking care of self). Further, development of delivery structures and enlisting supports would be required to shift culture at multiple levels (individual, programme and organization).

Self-management support is advocated as an effective intervention for patient engagement, building capacity to proactively manage chronic illnesses, improve health outcomes, and appropriately utilize healthcare resources.¹¹ For schizophrenia, substantial evidence for self-management interventions is at the level of guidelines for routine service delivery.¹² Meta-analyses of self-management interventions alongside standard care for severe mental illness, at 1-year follow-up, revealed significant benefits to symptom severity, global functioning, length of hospital stays, quality of life and recovery-related outcomes such as sense of empowerment, hope and self-efficacy.¹² Findings for relapse and readmission were inconsistent. However, another meta-analysis found delivery of more than 10 self-management support sessions reduced relapse (59% less likely) and rehospitalization (65% less likely).¹³ These two meta-analyses revealed diversity regarding intervention content and approach. Some interventions used psychoeducation to emphasize symptom outcomes, illness management, treatment adherence, while others were directed by recovery-focused outcomes, and used personalized experiential learning with emphasis on the management of health and illness. Health planners call for engaging patients and families in both education and self-management support with shared decision making.¹⁴

Questions remain about how best to deliver self-management support for PWS in a way that is accessible, acceptable to clients and providers, and feasible for implementation in routine care. Self-management programmes are criticized for being time limited, removed from service delivery, restricted to illness management, and not necessarily delivered within a socio-ecological approach of client-provider partnerships addressing clients' life challenges.^{9,15,16} A select group of clients are typically accessing such services which can further contribute to health inequities.¹⁷ Interventions targeting self-management needs are not part of routine practice in many settings.¹⁸ We chose to embed the innovation in routine services for broader client access while anticipating that additional operational structures would be needed to counter systemic gatekeeping that restricts access.

TABLE 1 Comparison of frameworks and application of self-management

	Disease-based framework	Recovery-based framework ^{7,8}	Self-management (SM) within a recovery framework (adaptation ^{9,10})
View of person	<ul style="list-style-type: none"> Deficits, limitations, problems Uninformed Recipient of care 	<ul style="list-style-type: none"> Whole person, resilient, potential for growth, transformation Expert, responsible, competent Requires social determinants of health and regaining a sense of control over life & illness 	<ul style="list-style-type: none"> Chooses how, when to engage in SM Ability to build capacity for SM; building on experiential knowledge, resilience Interdependent relationships with support network Actively balancing dynamic life demands of home, community and healthcare system
What is emphasized in therapy	<ul style="list-style-type: none"> Treatment of disease, symptoms Treatment driven by results of medical tests & procedures and providers' expert formulation of the problem Adherence to treatment regiment Regain independence, self-sufficiency 	<ul style="list-style-type: none"> Wellness & recovery planning Clients' preferences, values, goals, experiences, strengths Client involved in planning, implementing & evaluation of services Self-determination, choice is valued Expressions of hope, belief, opportunity to engage in meaningful, normalizing roles as citizens Accessing resources, information, peer support, self-help groups Developing supportive living/learning/working environments 	<ul style="list-style-type: none"> Life plans and community living challenges, including illness management Client defined concerns, challenges re: impact of health conditions on managing medical tasks, role functioning, emotions and sense of self; including managing stigma, discrimination, marginalization, occupational deprivation Learn healthy behaviours, self-monitoring & proactive tasks to live well with chronic conditions Opportunities for learning, practicing SM knowledge, skills & self-efficacy during & outside health services Social integration, reciprocity & social capital Accessing, effectively using available community resources & support networks
Client-provider roles	<ul style="list-style-type: none"> Provider works for, takes care of client. Provider as expert; assesses, treats, evaluates 	<ul style="list-style-type: none"> Collaborative partnership Client is expert in own recovery Provider as consultant 	<ul style="list-style-type: none"> Full collaborative partnership Client is engaged informed citizen, self-determined Provider is coach, resource, advocate Learning together; challenging barriers to health together

Further, the innovation would need to be sufficiently flexible to meet the dynamic needs of clients living with an episodic illness within the context of their daily living challenges. PWS have a 20% reduced life span, reflective of morbidity and mortality largely from cardiometabolic and chronic respiratory diseases,¹⁹ while contending with high rates of mental health comorbidities (i.e., substance use disorders, depression, anxiety²⁰). Local unpublished data indicated 67% of the target group lived with one to six additional chronic illnesses under treatment. This group experiences further disadvantages regarding many social determinants of health. They are more likely than the general population to have experienced trauma, discrimination, stigma, incarceration, homelessness or precarious housing, unemployment and food insecurity.³ The innovation needed to accommodate these inequities, and be tailored to clients' life realities.

1.2 | Local studies

To evaluate the local situation, two studies were conducted; one to obtain client experiences and perspectives, and another to capture

provider perspectives. Both studies provided evidence about barriers/supports for delivery, and opportunities for organizational change.

From 25 clients treated for schizophrenia in six local outpatient programmes, a phenomenological study identified unmet self-management learning needs regarding the impact of health conditions on emotions, relationships, occupations and evolving sense of self.²¹ Participants took 15–30 years to find the right combination of supports and self-management strategies, which compelled the query if increased access to strategic personalized self-management learning opportunities could shorten the prolonged recovery journeys. Further, healthy behaviours were constrained by reduced access to relevant information and limited opportunities to use their abilities. This highlighted the need for systemic, organizational change. Further, client participants described eight essential tasks to live well with schizophrenia that suggested content for delivering self-management support.

A case study of the process of enabling self-management with embedded interprofessional healthcare provider triads across eight locations, provided information as to what and how self-management



was being delivered, and the conditions influencing providers' actions.²² The study drew attention to self-management support not fitting conventional treatment boundaries or silos. Findings confirmed clients' perspectives that services have tended to focus on traditional psychiatric treatment following a medical model, crisis and risk management, and did not fully address the whole PWS, leaving gaps in clients' self-management learning needs. The dominant roles of the work environment and team culture in shaping providers' actions and perceptions were found to undermine the delivery of self-management support. Therefore, organizations have the potential to significantly influence providers' beliefs and practices, particularly given many of the workplace conditions are amenable to change. Study findings highlighted the importance of training the entire team to support change, and to pay attention to how routine tasks, procedures, work environment and culture shaped providers' intentions and behaviours.

2 | METHODS

2.1 | Design and theoretical framework

A team of clinicians and clinician-researchers led the initiative to integrate self-management into routine care. The innovation encompassed the development of a targeted self-management intervention. Researchers contend that implementation plans focused solely on providers are insufficient, and organizational changes at a programme level are necessary.²³ Changes such as integrated care, coupled with capacity-building of multidisciplinary teams and services, have led to improved client outcomes in specialized mental health services.²⁴ Theories and research about worker habits and integrating complex interventions into normal routines, point to embedding novel interventions into providers' daily work activities, and providers' ways of thinking and working.²⁵ Consequently, we chose to target the programme; integrating self-management within existing procedures and building team capacity.

An integrated knowledge translation (IKT) approach was selected as the most effective for organizational change and for developing a feasible model that was likely to be sustained.²⁶ Involvement of users and their knowledge and experience were essential to tailor a self-management support innovation to the social/organizational context. In this study, knowledge users included clients, healthcare providers and programme management. Knowledge users became knowledge producers by iteratively sharing information that shaped the formation of the innovation. Collaboration occurs along a spectrum of roles and activities.²⁷ In this study, the manager's role was at the 'empower' end of the spectrum by being involved in the development of the intervention and affirming the implementation. The clients were in 'consult' roles by sharing their successes, concerns and feedback. Acknowledging the gatekeeping role of providers, strategies to hear clients' voices included: providers asking clients for feedback about the way that they were working together and expectations of services; clients completing self-evaluations of

self-management abilities; and client-provider dyads coproducing knowledge products as reference tools. Multiple strategies were used to engage providers. Providers were invited to collaborate by providing advice, piloting the model, and offering solutions to challenges. The extent of participation was uneven across providers and clients. However, clients' and providers' advice and comments were acted upon to adapt the innovation and delivery expectations.

The Ottawa Model of Research Use (OMRU)²⁸ was used to manage and track the innovation. The model prompts an assessment of characteristics and transactional relationships among the innovation, potential adopters and practice environments that can act as supports/barriers to implementation, followed by targeted strategies to manage barriers and support adoption into practice. The OMRU not only considers the interdisciplinary nature of healthcare delivery from multiple perspectives but offers a contextual framework of client/provider-innovation-practice environment relationships that impact adoption of the innovation.

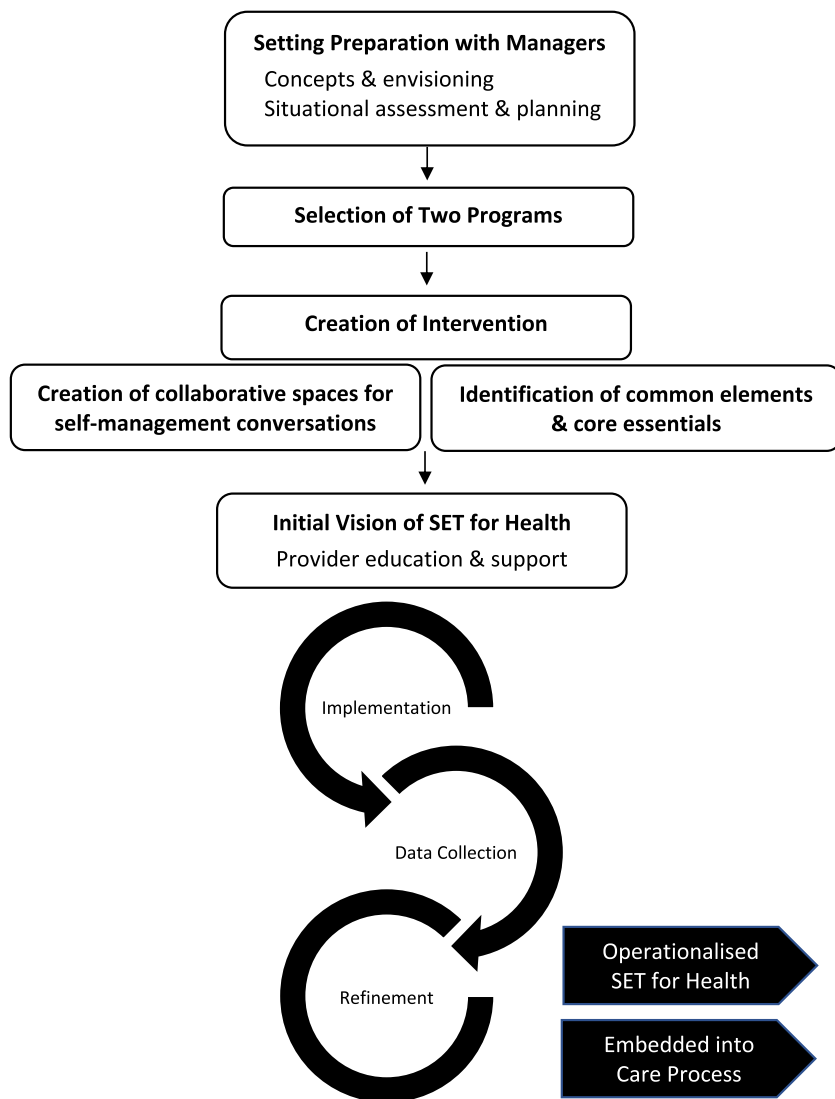
The process of developing and embedding the self-management intervention is outlined in Figure 1. The implementation of the intervention, data collection and refinement are reported in another paper.⁴ The study was approved by the Hamilton Integrated Research Ethics Board, study #3733. Informed written consent was obtained.

2.2 | Setting preparation

The setting was a tertiary, public, academic mental health service mandated to serve PWS and related psychotic disorders residing in a Canadian mixed urban and rural region of 1.6 million people. The first author was employed in programme evaluation/quality improvement, an occupational therapist with training in health research methods, and 30 years of work experience. Middle managers were targeted as project champions who can solve problems of resistance to change, a condition of successful projects.²⁹ Managers are positioned to leverage the innovation service-wide by leading implementation of service priorities.³⁰ The service director endorsed the delivery of self-management support. The first author shared findings from the two local studies with service leadership, introduced self-management concepts and began envisioning with service leadership what implementation could mean to clients/families and services by mapping a care process with integrated self-management conversations.

Next, the first author met individually with managers to coproduce *situational assessments* of inpatient and outpatient programmes. The assessments were conducted to strategically build on supports and address potential implementation barriers. Assessment of the innovation (referred to later as Self-management Engaging Together for Health [SET for Health]), the providers (potential adopters), and practice environment were guided by the OMRU. While considering the implementation of self-management support in the local practice environments, the Behaviour Change Wheel for Behaviour Change Interventions³¹ was used to assess providers according to 'capability' (psychological and physical

FIGURE 1 Steps taken to develop innovation



capabilities/limitations to implement the innovation), ‘opportunity’ (circumstances outside the individual that help/hinder implementation) and ‘motivation’ (reflections, beliefs, habits, emotions that encourage/detract from implementation). Strengths and weaknesses were mapped and discussed according to these elements (Table 2). For strategic planning, the mapping facilitated consideration of provider habits and practices to target, while recognizing opportunities to build on strengths and support providers to enact capabilities. Next, potential behaviour change techniques were considered that matched selected approaches³² (Table 3).

Two of the larger service’s outpatient programmes were selected as targeted sites based on the situational assessment and a commitment by the manager (3rd author). A 750-client outpatient programme provided community outreach and clinic-based services of variable intensities. The programme utilized a case management model with interdisciplinary teams of psychiatrists, nurses, occupational therapists, social workers, recreational therapists, vocational counsellors and auxiliary services (e.g., medical, peer support, family

support, spiritual care, pharmacy, diabetes care, psychology and addictions). Also selected was a bridging programme (supervised by the same manager) consisting of one interdisciplinary team that supported 150 clients for 3–5 years, transitioning from inpatient stays until established with a community psychiatric follow-up.

Self-management support was viewed as a natural fit with tertiary case management delivery. The existing case management service afforded a delivery structure that supported the investment of time working with clients and was mandated to address holistically clients’ community living challenges. Importantly, the strategy enabled leveraging a committed workforce with expertise in engaging the target population in care, and often, had established trusting client relationships. With PWS, establishing a trusting relationship can be a lengthy, challenging process thus pre-existing client–provider dyads presented an advantage to SET for Health implementation. Conversely, pre-existing relationships can present another set of challenges for shifting pre-established ways of working together.

**TABLE 2** Provider strengths and weaknesses mapped on the elements of capability (C), opportunity (O), and motivation (M) that influence behaviour (B) in the COM-B system³¹

Psychological and physical capability (C) to engage in self-management support (SMS)	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Potential champions • Builds on existing concepts: <ul style="list-style-type: none"> ◦ Recovery, client-centred practice, cultural competency, trauma-informed care, person-environment-occupation fit, adaptation • Uses existing skills/techniques <ul style="list-style-type: none"> ◦ Motivational interviewing, cognitive behavioural therapy strategies ◦ Crisis planning, teachable moments ◦ Social learning theory 	<ul style="list-style-type: none"> • Provider knowledge re: health, SMS • Range of provider skills with gaps <ul style="list-style-type: none"> ◦ Tailored client-directed learning ◦ Client self-reflection, problem-solving ◦ Capacity-building of client + support network ◦ Clinician self-regulation • Client-provider roles <ul style="list-style-type: none"> ◦ Negotiating a partnership, shared decision making & risk planning ◦ Breaking cycle of client disempowerment
Reflective, habitual and emotional motivation (M)	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Matches values, mission & mandate • Links with professional identity, sense of self, job satisfaction • Challenges viewed as learning experiences 	<ul style="list-style-type: none"> • Beliefs acting as barriers (e.g., client growth potential, anticipate negative experience) • Actions shaped by perceptions of risk/fears • Social norms, habits not yet established
Opportunity (O) or factors outside the individual making behaviour possible	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Long-standing relationships with clients • Flexibility re: intensity of service delivery • Existing tools, resources <ul style="list-style-type: none"> ◦ WRAP, Crisis Plans, OCAN, Client Needs Identification, Comfort Plans • Existing care processes re: client/family orientation, engagement • Interdisciplinary teams 	<ul style="list-style-type: none"> • Whose job is it to do what? • Creation of strategic self-management learning opportunities in task-focused culture • Spaces for clients to use & practice SM throughout care path • Healthcare environment undermines partnerships, self-determination • Disease focus versus living well

TABLE 3 Example of one targeted behavioural determinant matched with potential behaviour change techniques

Target motivation–weaknesses ³¹	Behaviour change techniques ³²
Provider assumptions and beliefs acting as barriers to implementation: <ul style="list-style-type: none"> ◦ Client potential for change ◦ Client competence & confidence re: coping with stress, decision making, responsibility ◦ Actions may undermine provider–patient relationship ◦ Perceived inconsistent with priorities 	Goal specified as expected behaviour Information linking behaviour & outcomes Persuasive communication of priority, importance by leadership, peers Social encouragement & support Incentives, self-evaluation, intention statements Homework, experiential tasks graded easy to harder with review, self-reflection

3 | RESULTS

3.1 | Creation of the intervention

The project aimed to align care processes and services to facilitate all clients to have access to self-management support. There were three key issues. First, we needed to find ways to integrate self-management into routine service delivery and facilitate sustained organizational change. Second, we recognized that we needed flexibility to tailor interventions to individual client preferences, diverse needs and living circumstances, and to accommodate dynamically changing health status and life circumstances. Third, we desired a minimum level of standardization that would allow for programme evaluation and

systematically address clients' self-management needs. The workforce had diverse professional orientations and training within different organizational cultures and models of care which brought concerns around conceptual uptake, feasibility and fidelity.

Fisher and colleagues described a whole systems approach to self-management for individuals living with diabetes that influenced envisioning the innovation as delivering services in multiple and different formats and venues to reach the same ends while addressing self-management at a health systems level (entire care path of services and supports for living).³³ The authors offered a persuasive argument that such an approach held greater likelihood of being effective by improving access to resources and supports tailored to the skills and choices of individuals in the context of personal social supports and

living environments. Having the flexibility to respond to the diversity was engaging. Also, such an approach potentially would less likely reinforce the concerns of health services defining the rules and stereotyping a particular client self-manager.³⁴

Six established self-management approaches used with mental illness were reviewed: Flinders Chronic Condition Management Program (<https://www.flindersprogram.com.au/>), Expert Patients Programme (<https://www.nelft.nhs.uk/epp/>), Stanford Chronic Disease Self-Management Program (<https://www.selfmanagementresource.com/>), Illness Management and Recovery (IMR) (<https://www.samhsa.gov/>) and Integrated IMR (I-IMR),³⁵ Admire Plus (SMART Model) (https://www.freerehab.center/li/az-admire_plus_dual_diagnosis_program), and Health Coaching.³⁶ Supporting Information Tables describe the similarities and differences of these six approaches (Supporting Information: Appendix A). All were designed to augment standard treatment and other rehabilitation services. Although each arose from different traditions, sectors and locations around the world, over time, they converged to create interventions that addressed the impact of both physical and mental illness needs, including dealing with addictions. None of the existing approaches reviewed were deemed feasible to be offered for every client served in the context of the target clinical setting. They were discounted for three main reasons: (1) prohibitive financial costs related to protected intellectual property, requiring considerable expenditures for training and use of intellectual properties; (2) inflexible protocols with lengthy curriculums that were believed to be not feasible for delivery with PWS and co-occurring conditions such as intellectual or cognitive impairment or reduced stamina, and would be counter to client preferences, learning needs; and (3) questionable completion rates. Even the most studied standardized self-management programme, IMR developed for schizophrenia and other serious mental illnesses, had 51% attrition rates of drop-outs and only 44% completions.³⁷ These findings were not congruent with our aims to develop an engaging, flexible, self-management support protocol that could be offered to all PWS being served within a recovery-oriented service directed by clients' goals using existing resources. As such, key elements from the reviewed protocols were used as a basis to develop the novel intervention.

While approaches varied in how they were structured, they had common key elements that were used as a basis for the innovation:

- Focused on changing health behaviours and making healthy decisions.
- Used motivational strategies to engage and sustain behavioural changes based on Social Cognitive Theory³⁸ and motivational interviewing techniques.
- Involved interactive, structured teaching of problem-solving and coping strategies to increase knowledge, skills and self-efficacy for managing the day-to-day tasks of living with a chronic condition(s). Approaches varied in the extent to which they went beyond following medical regimens and illness management (early signs, actions to prevent and manage relapses) to deal with the impact of health conditions on self, emotions, relationships and roles.
- Used problems and concerns identified by clients and their life experiences to direct the focus and content of sessions and reinforce learning.
- Facilitated development of a network of supports and use of local resources.

In addition to the key elements identified above, we selected elements from the Stress Vulnerability Model of Psychosis³⁹ and Recovery Model⁴⁰; a common feature of programme content, offering clients an understanding of stress-health-illness relationships and an active role to proactively act on experiences. A personal self-management plan codesigned by client-provider dyads was flagged as an important piece for proactive planning and collaboration. The Wellness Recovery Action Planning (WRAP)⁴¹ and the self-management plan from the Flinders Chronic Condition Management Program were identified as key examples.

Integrating these elements of established approaches, we focused on five core essentials for the development of SET for Health:

1. Coach application of the Stress Vulnerability Model of Psychosis within a recovery framework for a shared framework of understanding and common language.
2. Coach goal action planning and problem-solving for clients to pursue their recovery goals while managing the impact of health conditions (mental and physical) on daily living.
3. Create structured, experiential learning opportunities that guide client learning by doing meaningful life activities in line with their recovery goals and by supporting self-reflection.
4. Advise and coach healthy behaviours, habits, and lifestyle using strategies informed by motivational interviewing, adult education, and cognitive behavioural therapy to engage and sustain behavioural changes.
5. Assist clients to assemble a toolbox of self-management strategies, and to use client and provider codesigned reference tools, including individually tailored self-management plans.

In the context of competing demands and historical paternalistic practices, we needed to create spaces for client-provider conversations and self-management learning opportunities. Since these spaces were to foster client voice, client participation, shared decision making and collaborative action, their creation was central to the innovation and provider education. We elected to use interactive visual materials (i.e., videos, worksheets and questionnaires) to evoke client voice, provide accommodation for any cognitive and social disabilities, and to generate tangible reference tools coproduced by clients and providers. These tools offered a common language, and understood meanings for reference in on-going sessions. They were designed for use by clients at home to support behaviour change, and to share with their support networks/family.

The five core essentials and tools to deliver self-management support within a recovery-oriented approach comprised the intervention. This intervention, developed to be embedded in case management services for PWS and comorbidities was called *SET for*



Health (Self-management Engaging Together with healthcare providers for Health).

4 | DISCUSSION

4.1 | Summary

This article described the planning, preparations and decision making behind the development of a novel model of self-management support that would be accessible to PWS and comorbidities, and feasible to deliver in the traditional tertiary healthcare delivery workplace context with existing resources. We elected to target organizational change at the level of the programme; integrating self-management within existing procedures and building team capacity. An IKT approach was used to foster organizational change. The setting was strategically prepared by working with middle managers to envision self-management services by reviewing local studies' findings and mapping proposed care paths. Situational assessments identified supports and potential barriers to target for implementation, and assisted selection of target programmes to begin embedding changes into existing case management services for evaluation. A review of established self-management approaches used with clients with mental illness revealed that they were not congruent with our aims and context of service delivery. After identifying and synthesizing the common elements of established self-management approaches, five core essentials of self-management support formed the basis of the SET for Health intervention. To create spaces for client and provider collaborative self-management conversations, and self-management learning opportunities, interactive materials generated reference tools coproduced by clients and providers. The next article describes the process of implementing and evaluating the model that involved training providers, piloting and refining the intervention, and collecting data on the feasibility of delivery.⁴

4.2 | Self-management support is a social learning enterprise

At its core, self-management support is a social encounter. People are social beings, and learn through social and environmental interaction assigning meaning to experiences and actions. Knowledge is socially constructed, continually negotiated and contested.²⁴ The implications for the innovation are that opportunities need to be created to foster safe collaborative interactions, promote socioecological interactions by their own actions, and facilitate ascribing new meanings to experiences and actions. Hence, for clients, our emphasis with SET for Health is on learning by doing with reflection, and with the use of visual materials and client-provider codesigned reference tools. This approach is applicable for both clients and providers given the venture involves capacity-building and learning for both parties. The implication for implementation means planning for sufficient opportunities and time for healthcare providers to practice and enact new learning, opportunities to discuss experiences, reflect on learnings and have

safe facilitated spaces to contest and negotiate tensions and dilemmas so that new ways of working together may be explored.

Coaching clients to take responsibility for their health, sustained by a community support network and healthcare team, necessitates a reorientation of client-provider roles, contesting and redefining the social 'rules'. For some clients and providers, this means reframing understandings and relationships with illness, health and service needs. The shifts in beliefs and practices are echoed in literature calling for recovery-based services.¹ The Theory of Diffusion of Innovations suggests that facilitated discussions with workplace colleagues can reframe interpretations of experiences and shape attitudes.²³

4.3 | Planning for sustainability

Given the considerable time and resources required for creating and implementing a model of self-management support, it was important to consider planning for sustainability from the start. The selection of an IKT approach to develop the innovation was one strategy. The integration of end-users into the development process affords opportunities for obtaining the necessary, relevant information to target and tailor information, and for identifying the necessary workplace processes and structures that need to be modified or added for routine implementation. IKT supported the dialogue essential to the social learning process of ownership and commitment which was critical for implementation of the innovation.

Furthermore, designing the model to be embedded in services was in recognition that amidst providers' competing daily demands, to be sustained, self-management support would need to be operationalized into routine procedures. Providers would need assistance to integrate this new approach into their own toolbox of interventions and develop new habits for daily practice.

4.4 | Lessons learned in planning and innovation development

Using maps of clients' experiences learning self-management²¹ to convey client voices and visually depict service gaps was a persuasive strategy to engage and mobilize managers. Also, sharing provider narratives of workplace challenges²² resonated with managers to envision change and opportunities for planning actions. Conducting a situational assessment using the Behaviour Change Wheel³¹ was also helpful. The concepts of capability, opportunity and motivation were intuitively understood by managers to consider what staff bring to delivery within the healthcare environment. Keys to success were a committed manager and healthcare providers willing to participate. Further, the primary investigator provided a dedicated resource familiar with both the client population and the clinical teams to support the change process. The selected programmes promoted teamwork with a solution-oriented culture which provided an important foundation for using an IKT approach.

5 | CONCLUSIONS

Developing and studying ways to sustain and support self-management has gained increasing importance to healthcare planners and policy makers with the advent of self-management being recognized as a practice standard in the Health Quality of Ontario Quality Standards (2018), *Schizophrenia Care in the Community for Adults*.³ Planning and preparing to deliver self-management support for PWS brings to attention the complex social ecological nature of this approach to care. Based on learnings from local studies, literature review and creators' clinical experiences, a model of self-management support, SET for Health, is ready for demonstration and evaluation.

AUTHOR CONTRIBUTIONS

All authors participated in the conceptualization and design of the investigation and reflexive analysis; all contributed to the discussion of the main focus and this paper's ideas; all reviewed, edited and approved final manuscript. Susan Strong as PI, took a lead role in the conception and design of the study, took lead in applying for and acquired funding, and directed the study; conceived the innovation; and prepared the first draft of the manuscript. Lori Letts helped design the study, contributed to interpretation of results and conceptualization of the manuscript and contributed to writing. Alycia Gillespie assisted study administration, acquisition of resources, interpretation, visualization and operationalisation of the innovation, and contributed to writing discussion section. Mary-Lou Martin assisted provider training, data collection-audits, interpretation and editing draft manuscript. Heather E. McNeely assisted in conceptualization of the project, contributed to provider training, interpretation of findings and contributed to revisions of the draft manuscript.

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CONFLICTS OF INTEREST

Portions were part of first author's PhD dissertation. The first, third, fourth and fifth authors declared potential conflict of interest with respect to research, given employed by St. Joseph's Healthcare Hamilton, and no conflicts of interest with respect to authorship and/or publication. The third author is a manager of study site. The second author was a PhD Committee member, and declared no potential conflict of interest.

DATA AVAILABILITY STATEMENT

Data are available on request from the authors.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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