Evaluation of the 1-Year NAVNET Demonstration

Summary Report

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In addition to the completion of a comprehensive final report, the authors were asked to submit a summary report in which some of the more detailed results have been removed. Full results can be seen in the final report dated November 2012.

Disclaimer

We have made every effort to ensure that the information in this report is accurate. However, as much of the information was obtained from second-hand sources, it may include some errors or omissions.

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List of Abbreviations

ADHD	Attention Deficit/Hyperactivity Disorder
AES	(Department of) Advanced Education and Skills
B&B	Bed and Breakfast
B/L	Board and Lodging
CFY	Choices for Youth
CSP	Community Supports Program
CYFS	(Department of) Child, Youth and Family Services
DBP	Developmental and Behavioural Practitioner
DOHCS	Department of Health and Community Services
DOJ	Department of Justice
ED	Emergency Department
EH	Eastern Health
FASD	Fetal Alcohol Syndrome Disorder
GP	General Practitioner
HSC	Health Sciences Centre
MCR	Mobile Crisis Response
MHA	Mental Health and Addictions program
MOU	Memorandum of Understanding
MPT	Multisystem Planning Team
NAVNET	Navigators and Networks
NL	Newfoundland and Labrador
NLHC	Newfoundland and Labrador Housing Corporation
PAU	Psychiatric Assessment Unit
PIER	Psychosis Intervention and Early Recovery
PTSD	Post Traumatic Stress Disorder
SBCS	Stella Burry Community Services
SCM	St. Clare's Mercy Hospital
SSAU	Short Stay Assessment Unit
WAT	Waterford Hospital

Executive Summary

Navigators and Networks (NAVNET) is a program that was developed to address the gaps in services and systems barriers that impact individuals with multiple and complex needs living in the St. John's area. Work on the NAVNET initiative began in 2009 in response to a study authored by Boland, Earle, McConnell, Brothers, and McConnell (2008)[1] and sponsored by Eastern Health and the Department of Advanced Education and Skills. In February 2009, with support from the Poverty Reduction Strategy and Eastern Health, a Project Coordinator was hired to assist with the development of the NAVNET program. The NAVNET member organizations were identified and senior representatives from these government departments and community organizations formed the NAVNET Steering Committee which began meeting monthly.

The NAVNET Steering Committee currently includes Regional Directors/Directors from the Department of Health and Community Services, Eastern Health (Mental Health and Addictions and Community Supports Program); Department of Advanced Education and Skills; Department of Justice; Newfoundland and Labrador Housing Corporation; Stella Burry Community Services; and Choices for Youth. Since May 2009, the NAVNET Steering Committee members have approved a strategic plan, established working groups, undertaken a baseline cost analysis, and developed a Memorandum of Understanding for the purposes of information-sharing and a coordinated systems model for individuals with multiple and complex needs residing in St. John's.

After the first client was enrolled in August 2011, the front-line service providers, hereafter referred to as multi-system planning team members, were identified and began meeting every two weeks to determine client goals, develop and implement client support plans, coordinate wrap-around services, and measure the progress of their respective NAVNET client(s).

The Applied Health Research Division of the Department of Research, Eastern Health was commissioned to conduct an independent evaluation of the 1-year NAVNET demonstration, which began when the first client was enrolled. This report presents a summary of the results of the evaluation. A comprehensive final report dated November 2012 is also available.

Key Findings

Five clients were initially accepted into the NAVNET program. With the incarceration of one client three months after his enrollment, an additional sixth client was accepted into the program. Thus, the final sample of the evaluation consisted of three females and three males ranging in age from 21 to 54 years. All of the clients presented with mental health and/or addictions issues, difficulty finding or maintaining suitable housing, and challenging behaviors. Many of the clients also have cognitive delays, experienced social isolation and were involved with the criminal justice system.

[1] Boland, B., Earle, A., McConnell, S.M., Brother, D. & McConnell, S. (March 2008). Navigators and Networks: Harnessing resources and meetings the needs of individuals with complex needs.

The evaluation found that the NAVNET Steering Committee members expressed a high level of commitment to the NAVNET process. They are familiar with the barriers that individuals with multiple and complex needs face, and they recognize the need for a systems-wide change in how service is provided. The development of NAVNET has led to increased information sharing and collaboration among both the NAVNET Steering Committee members and among the multi-system planning team members. The Memorandum of Understanding allowed for the free exchange of information among NAVNET member organizations, and this was noted as one of the greatest strengths of the initiative. In addition, many participants indicated that their involvement in NAVNET has led to a greater understanding of other organizations/programs and their policies and mandates.

The development of NAVNET has allowed for some "policy bending", or the flexible application of policies, especially with regard to the provision of funds. However, few formal policy changes have occurred and resources remain limited, particularly in the availability of suitable housing. This has impacted the clients and the provision of service, and has led to feelings of frustration among several multi-system planning team members. Some multi-system planning team members expressed disappointment that their expectations of NAVNET had not been met. For example, several felt that NAVNET should not be case managing clients. Others felt that NAVNET lacked a plan for crisis response. In contrast, many of the multi-system planning team members indicated that the NAVNET model of service provision is a good one.

An examination of service utilization data points to high variability among the clients. Due to the shortage of affordable housing in St. John's and the reluctance of private landlords to rent to these clients, the utilization and direct costs associated with emergency accommodations decreased only slightly during the 1-year demonstration phase. Total costs associated with apartment and board and lodging accommodations increased by 73% after the clients enrolled in NAVNET. This was due to both an increase in the number of days clients spent in apartments or board or lodging arrangements and increases in the cost of rent. In total, the client sample showed a slight increase in emergency department presentations during their involvement in NAVNET compared to 1-year prior, but the total number of inpatient days at Eastern Health's urban acute care facilities decreased. Thus, total costs associated with healthcare utilization decreased by 36%. Total costs associated with probation decreased by 7% during the clients' enrollment in NAVNET. It is important to note that the clients' probationary periods began prior to their enrollment in NAVNET and, in some cases, continued after enrollment. With the exception of one client whose involvement in the program was discontinued, none of the clients were incarcerated in the 1-year prior to and during NAVNET.

Overall, NAVNET has had a positive impact on clients. Many of the clients were able to find and/or maintain housing due to the coordinated efforts of the multi-system planning team members and the provision of additional funding. It is likely that some front-line service providers maintained or increased their contact with clients due to their participation in NAVNET and increased accountability. As a result, several clients evidenced increased engagement and developed improved relationships with their service providers. The importance of this cannot be overstated, as it likely allowed for progress in several areas of the clients' lives including improvements in behaviour and self-care and increased involvement in community activities. However, due in large part to the nature of this clientele, progress has been slow but

not insignificant. It is important to consider the client population when determining benchmarks for success and to continue to measure client progress and evaluate processes in order to maximize the benefit for both service providers and the clients they serve.

Key Recommendations

1. It is recommended that NAVNET continue and, in an effort to provide equitable service and to avoid a lengthy waitlist and wait-times, expand its client capacity.

2. It is recommended that additional meeting facilitator(s), who are adept at navigating team dynamics, be hired for the NAVNET initiative. This will allow the NAVNET coordinator adequate time to 1) focus on bridging the gap between front-line service providers and NAVNET Steering Committee members, 2) make changes to the NAVNET service model, as necessary, and 3) advocate for policy changes. The addition of a part-time administrative position will also benefit the program.

3. It is recommended that, in an effort to provide seamless and timely service, NAVNET member organizations develop a coordinated funding system. The funds would then be administered at the discretion of NAVNET, with the expectation that the program be accountable and transparent to the NAVNET member organizations in how funds are allocated.

4. It is recommended that the NAVNET Steering Committee include a representative from the Department of Health and Community Services.

5. It is recommended that NAVNET review its partnerships with key stakeholder organizations in an effort to renew their commitment. The NAVNET member organizations' commitment to NAVNET must be communicated clearly to the managers and front-line service providers.

6. It is recommended that NAVNET member organizations focus on policy changes so that the work of the front-line providers is supported and consistent with the NAVNET philosophy.

7. It is recommended that the NAVNET Steering Committee members advocate for a sustainable solution to the shortage of affordable housing and promote the development of more appropriate, potentially less costly, community-based accommodation options for individuals with multiple and complex needs. Adequate housing is critical to the success of these clients; the gains made by NAVNET will not be maintained in the absence of suitable, long-term housing.

8. It is recommended that an exit strategy for clients be developed. This strategy should incorporate a maintenance plan so that clients do not return to their pre-NAVNET levels of functioning.

9. It is recommended that NAVNET examine client characteristics in an attempt to determine if some clients are more or less appropriate for the program. Future research could examine the client characteristics that are associated with the greatest success. This information may be used to inform the program's eligibility criteria.

10. It is recommended that, in addition to the continued use of the Assessment Matrix, NAVNET adopt the use of a standardized assessment tool, such as a quality of life instrument, to measure client progress. In addition, it is suggested that the NAVNET initiative include an assessment of clients' behaviors to determine if they are impacted by the clients' involvement in the program.

11. It is recommended that NAVNET continue to evaluate processes and client outcomes over the long-term and make changes, as necessary, in an effort to provide the most efficient and effective service to clients.

A complete list of recommendations is provided in Section 6.0.

1.0 Introduction

1.1 Background

In 2008, Eastern Health (EH) and the Department of Advanced Education Skills (AES) sponsored a study that examined the experiences of individuals with multiple and complex needs in St. John's and the barriers they encounter in accessing support and services. The resulting report, *Navigators and Networks: Harnessing resources and meeting the needs of individuals with complex needs* (Boland et al., 2008) recommended that a "network" of government representatives work together to explore innovative solutions to these barriers. Thus, in 2009, the NAVNET initiative was established in an attempt to address the system barriers that impact individuals with multiple and complex needs living in the St. John's area.

In February 2009, with support from the Poverty Reduction Strategy and EH, a Project Coordinator was hired to assist with developing the NAVNET program. Since its inception in May 2009, NAVNET Steering Committee members (hereafter referred to as NAVNET Members) have approved a strategic plan, established working groups, undertaken a baseline cost analysis, and developed an information-sharing protocol and a coordinated systems model for individuals with multiple and complex needs residing in St. John's. The 1-year demonstration phase began in August 2011 when the first client was enrolled in NAVNET and continued for a period of approximately one year. It is this 1-year demonstration period that the evaluation is based on.

1.2 The NAVNET Initiative

Prior to the formation of NAVNET, government organizations and community agencies worked independently to provide services to clients with multiple and complex needs. This process, however, proved to be fragmented with lack of communication between service providers and policies that negatively affected working relationships (Boland et al., 2008). The need for an integrated collaborative network offering a multi-system approach to service delivery led to the formation of NAVNET. NAVNET comprises a network of senior government and community representatives whose aim is to work collaboratively to explore innovative solutions to address the gaps in services and barriers faced by clients with multiple and complex needs.

NAVNET is comprised of senior government representatives (Regional Directors, Directors, CEOs) from several government departments and community organizations including the Department of Health and Community Services (DOHCS); EH's Mental Health and Addictions program (MHA) and Community Supports Program (CSP); the Department of AES (formerly the Department of Human Resources, Labour and Employment); Department of Justice (DOJ); Newfoundland and Labrador Housing Corporation (NLHC); Stella Burry Community Services (SBCS); and Choices for Youth (CFY). In addition, the Children, Youth and Family Services (CYFS) Department signed the MOU when it was a department within EH. However, the department has since moved to the Newfoundland and Labrador (NL) Provincial Government and has not signed the MOU.

1.3 Individuals with Multiple and Complex Needs

Individuals with multiple and complex needs are understood as facing numerous challenges including mental health issues, addictions issues, developmental issues, involvement in the criminal justice system, and problems finding and maintaining housing. These needs, often in combination, require individuals to access services and supports from a wide variety of government systems and community organizations. Unfortunately, access to required services for this population is habitually difficult to achieve, as individuals with complex needs face a number of systems-wide barriers including difficulty obtaining information regarding the types of supports available to them, inflexible policies, lack of coordination among service providers, and service gaps in care and delivery[2].

Individuals identified as experiencing multiple and complex issues often present with a combination of the following:

- Persistent and severe mental health issues
- Addictions
- Brain injury (acquired/birth)
- Developmental delays
- Fetal alcohol syndrome disorder (FASD)
- Having challenging behaviours (including violent) that place the individual at high risk to self, service staff, and/or community
- Involvement with the criminal justice system
- Issues related to finding and maintaining housing and/or periods of homelessness
- Receiving services/supports from multiple government systems/community agencies
- Exclusion from government and/or community services
- Limited or no relationships with family, friends, and/or community
- Chronic or episodic behaviours and conditions that require long term service responses

1.4 NAVNET's Service Delivery Model

NAVNET's framework was developed and anchored on evidence-based initiatives carried out in Australia, as their work with comparable populations resulted in positive outcomes for the clients and organizations involved. For example, an evaluation of Sydney, Australia's Integrated Services Project for Clients with Challenging Behaviour found that clients involved in the program experienced a decrease in challenging behaviours and hospital and criminal justice use (McDermott et al., 2010).[3] In addition, clients showed increased independence in daily living and reported improved health and well-being, as well as increased social and community involvement. Staff and stakeholders also reported positive improvements including flexibility, consistency of support, staff stability, and enhanced learning.

[2] Boland, B., Earle, A., McConnell, S.M., Brother, D. & McConnell, S. (March 2008). Navigators and Networks: Harnessing resources and meetings the needs of individuals with complex needs.

[3] McDermott, S., Bruce, J., Fisher, K.R., & Gleeson, R. (2010). Evaluation of the Integrated Services Project for clients with challenging behaviors: Final Report, *SPRC Report 5/10*, prepared for Ageing, Disability, and Home Care, Department of Human Services, NSW, Social Policy Research Centre, Sydney.

Similarly, an evaluation of the Multiple and Complex Needs Initiative (MACNI, 2009)[4] operating in Victoria, Australia, found that clients experienced improved stability in housing, health and well-being, social connectedness, and safety. Further, feedback from service providers indicated they were better equipped and more willing to work with clients with complex needs. In addition, they reported increased collaboration among service providers.

These programs provide a framework for coordinated and collaborative service delivery for clients with multiple and complex needs and, as such, helped inform the development of the NAVNET program. The key components of the NAVNET service model include:

- The development of a definition of "multiple and complex needs" to ensure NAVNET would respond to specific groups of individuals for whom other options do not exist or have been exhausted.
- The project coordinator works with other senior NAVNET Members to identify which systems/departments/organizations need to be involved on the Multisystem Planning Teams (MPTs). The staff on these teams will be involved in a coordinated approach of client assessment and support planning.
- The provision of a primary worker, or a case manager, to provide one-on-one support. The support is intensive and based on client need.
- Coordinated assessment and multi-system support planning.
- The development of comprehensive support plans.
- The provision of attaching funds to individual support plans with the aim of addressing barriers that clients encounter when necessary funds are tied or slowed due to bureaucratic processes.
- A process to identify and address system barriers (policies and practices) that might be preventing clients from meeting the goals they have set out in their support plan. These gaps are to be brought to the NAVNET Members for review and resolution.

1.5 The Client Referral Process

At this time, NAVNET will only accept referrals made by staff from NAVNET member organizations. The client referrals are screened by the NAVNET Coordinator and several NAVNET Members. Upon a client's entry to the program, the NAVNET Coordinator determines which government and community organizations should be approached to take part in developing and implementing his/her support plan. These front-line service providers are selected by the NAVNET Project Coordinator or other team facilitator. The departments/agencies chosen typically represent those currently providing services to the client. If it is determined, however, that a client may benefit from a service he/she is currently not receiving, additional departments/agencies may be asked to send representatives to join the client's team. When departments/agencies from outside of NAVNET are asked to join the NAVNET initiative, they are added as temporary NAVNET Members on the MOU. Together, these front-line service providers form the MPTs.

[4] Multiple and Complex Needs Initiative (February 2009). Review of the client status post termination from the Multiple and Complex Needs Initiative (MACNI), Snapshot Study May 2008-July 2008.

1.6 Multisystem Planning Teams

Each client had his or her own MPT. When the MPT members first meet, they are introduced to the NAVNET initiative, identify their roles, and complete the NAVNET Assessment Matrix tool (see Appendix A). In the initial meetings, they also develop client goals and interventions which are informed by their own work with the client and a client goal information sheet, which is completed by the client with assistance from his or her case manager. The MPT members continue to meet biweekly to develop a comprehensive support plan, implement the plan, provide updates, and measure outcomes. The MPT members also assess the clients quarterly using the Assessment Matrix tool. At each of these assessment meetings, the comprehensive support plan is reviewed and, if necessary, adjusted to reflect new client goals and interventions.

1.7 NAVNET Assessment Matrix Tool

This NAVNET Assessment Matrix tool (see Appendix A) has been adapted, with permission, from tools previously used by the Buffalo House in Red Deer, Alberta, and Downtown Emergency Services in Seattle, Washington. The NAVNET Assessment Matrix Tool contains 17 domains (e.g., survival skills, housing, legal, family relations) and was developed to help determine a client's level of functioning and to identify areas of the client's life requiring improvement or further stability. Exploring each client's movement along the Matrix is a primary component of the client assessment, as it allows for a detailed exploration and evaluation of various areas of a client's life. It also allows for the identification of challenges that each client might be facing.

2.0 Objectives of the Evaluation

The evaluation of NAVNET's 1-year demonstration project was undertaken to meet the following objectives:

1. Examine the potential impact of NAVNET on client outcomes (e.g., access to services, satisfaction, stability, etc.).

2. Examine the impact of NAVNET on service provider outcomes (e.g., satisfaction, workload, workplace support, etc.).

3. Examine the impact of NAVNET on system processes (e.g., coordination, communication, referral patterns, timelines of responses, etc.).

4. Describe the overall operation of the NAVNET initiative (e.g., issues of governance, stakeholder involvement, funding arrangements, policy changes, etc.).

5. Examine the costs of client service utilization prior to and during NAVNET.

6. Identify recommendations and areas for future consideration.

3.0 Method and Results

In order to meet the outlined objectives, the evaluation team employed a mixed-methods approach involving the collection of quantitative and qualitative data from a variety of sources. The evaluators were originally asked to complete a mid-term evaluation only with an appraisal period of six months. Thus, many of the data collection activities took place in the early stages of client enrollment. However, the evaluation was later modified to include the entire 1-year demonstration period. The 1-year demonstration period began in August 2011 and ended in September 2012.

3.1 Client Profiles

3.1.1 Method

NAVNET clients were approached on two separate occasions to participate in an interview. The evaluators aimed to schedule an interview prior to each client's first MPT meeting and at the end of the 1-year demonstration project. Interviews were designed to collect in-depth qualitative data on the clients' history and quality of life before and during their involvement with NAVNET.

Four of the six NAVNET clients involved in the demonstration project consented to a baseline interview with the evaluators. Five of the six clients were approached to take part in a final interview with the evaluators, two of whom consented. One of these clients had been enrolled in NAVNET for approximately one year and the other had been enrolled for approximately six months.

3.1.2 Results

Research staff compiled client profiles based on information obtained from client interviews, case managers, and client referral forms. This information was used to provide a description of each of the clients at the time of their enrollment. Individual client profiles are excluded from the Summary Report.

3.1.3 Summary of Client Profiles

- Information for the client profiles was obtained from client interviews, case managers, and the NAVNET referral forms. Four of the six NAVNET clients consented to a baseline interview with the researchers.
- Originally, five clients were enrolled in the NAVNET demonstration project. However, because one client received a significant jail sentence approximately three months after he was enrolled in NAVNET, his MPT team became inactive, and a new client was enrolled.

- Of the six clients enrolled in the NAVNET demonstration project, 3 were female and 3 were male, ranging in age from 21 to 54 years at the time of enrollment.
- Clients presented with a complex combination of difficulties, including mental health and/or addictions issues, difficulty finding and maintaining housing, challenging behaviours, involvement in the criminal justice system, and social isolation.
- Mental health issues and difficulty finding and/or maintaining housing were the most common presenting issues. Several clients expressed a desire to move to more suitable housing.
- Several clients have known or suspected histories of childhood abuse/neglect.
- Several clients expressed a desire to obtain employment and/or further schooling and/or to develop more social connections/friendships.

3.2 Client Assessments

3.2.1 Method

Upon enrollment, each MPT case manager completed a brief survey with his/her client to obtain information regarding matters of importance to the client (e.g., likes, dislikes, important people, and desired changes/improvements and goals). In addition, client progress was measured by the MPT members and the Coordinator using the NAVNET Assessment Matrix tool. For the duration of the 1-year demonstration project, each client was assessed at three-month intervals throughout their involvement to determine if movement along each of the matrix domains had occurred. In instances where the client was enrolled for one full year, assessments were completed a maximum of five times: at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4) after client enrollment.

Information gathered from the client enrollment survey, the baseline assessment, and the client's history was used to create the client's comprehensive support plan. **The names of the clients have been changed to protect their privacy.**

3.2.2 Results

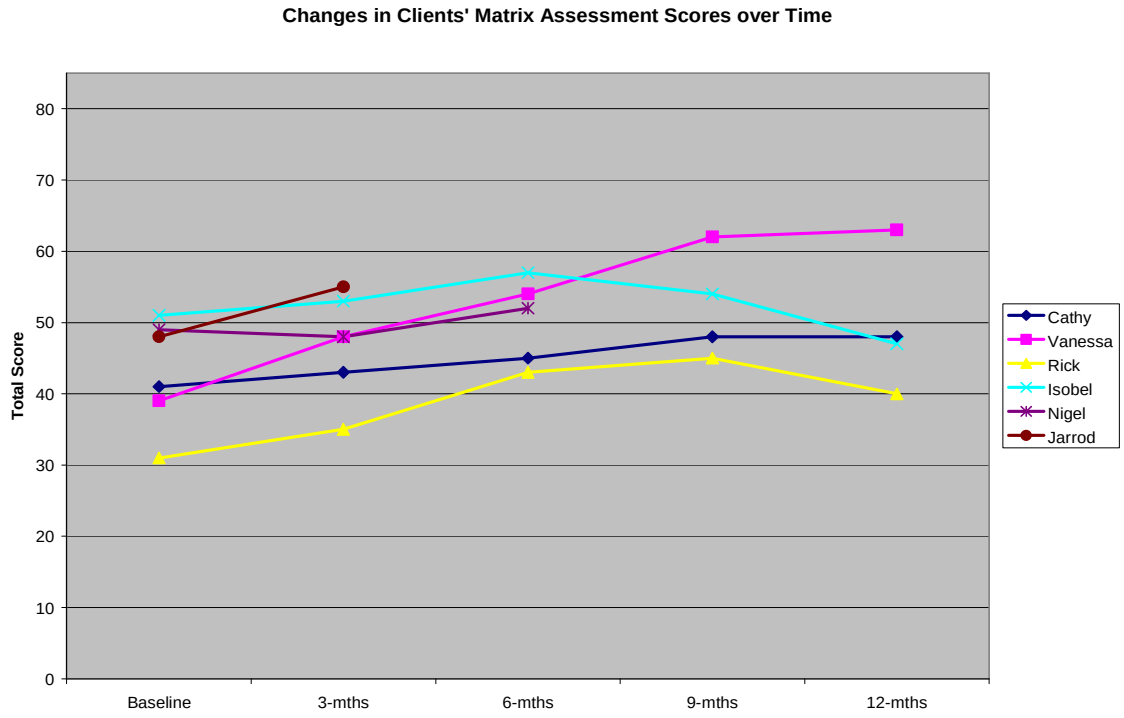
Client Goals, Interventions and Assessment Matrix Scores

Where available, the baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4) Assessment Matrix scores are presented for each of the six NAVNET clients (see Tables 1-6). In addition to the total assessment scores and individual domain scores, each table highlights the client's three priority areas in orange. **Higher scores represent higher or more positive functioning in the Matrix domains.** In addition to the Matrix scores, the following section

contains a detailed account of the MPTs' activities and clients' progress throughout the demonstration period.

Figure 1 presents each of the clients' Assessment Matrix scores over time. At the time of their final assessment 5 of the 6 clients had higher scores than at baseline.

Figure 1. Changes in clients' Assessment Matrix scores over time



Cathy

Upon initial assessment, Cathy scored 41 out of a possible 85 on the Assessment Matrix tool. The MPT determined that social behaviours, survival skills, and housing were areas where Cathy required the most attention. The short-term goals identified by the MPT included working with Cathy on developing healthy relationships, improving client engagement, and helping Cathy obtain basic necessities (e.g., phone and bed). Cathy's matrix assessment scores are presented in Table 1.

Table 1. Cathy: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4).

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Overall assessment score	**41**	**43**	**45**	**48**	**48**
Survival Skills	2	2	2	2	2

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Basic Needs	2	2	2	3	3
Income	2	2	2	2	2
Housing	4	5	5	5	5
Food	3	3	3	3	3
Life Skills	2	2	2	2	2
Physical Health	4	4	4	4	4
Mental Health	2	3	3	3	3
Substance Abuse	3	3	4	4	4
Social Behaviors	1	1	1	2	2
Communication	4	4	4	4	4
Legal	3	3	3	4	4
Family Relations	1	1	1	1	1
Social Connectedness	2	2	2	2	2
Transportation	3	3	4	4	4
Adult Education	2	2	2	2	2
Employment	1	1	1	1	1

Note: Priority areas highlighted in orange

At the 3-month and 6-month assessments, Cathy showed movement on the matrix from 43 to 45, compared to her baseline score of 41. Of the three priority areas, Cathy's score improved in housing, while the other priority area scores remained the same. At 9-months, Cathy's overall assessment score increased to a 48, with improvements in the areas of her basic needs, social behaviours, and legal issues. Cathy's scores on the matrix remained consistent from 9 to 12 months.

Social Behaviour

Cathy's social behaviour was one of the priority areas identified during the client's initial baseline assessment. At baseline, Cathy's MPT assigned her social behaviours a score of 1 out of 5. The MPT set goals aimed at supporting Cathy in developing insight and skills to effectively and respectfully interact with others.

At 3-months, Cathy's score had not changed. The MPT reported that Cathy had been spoken to about the potential implementation of a rewards program and her home support workers were introduced to the use of behaviour monitoring forms. The MPT was able to secure funding for

Cathy's behaviour reward program. The MPT indicated they were building trust with Cathy. In addition, they reported fewer incidents of receiving angry voicemail messages from her.

At 6- months, Cathy's social behaviours score remained at 1. The MPT members were providing Cathy with feedback in an attempt to increase her positive interactions. In addition, a rewards program was developed and implemented by the DBP, which was designed to reinforce Cathy for appropriate behaviour. SBCS staff members were trained to use the rewards program and data collection forms. The DBP reported that the rewards program was working well. Cathy's MPT reported that they provided positive feedback to Cathy regarding her behaviours and that she was developing more insight into how her behaviours impacted others. The MPT reported positive gains in building and maintaining trust with Cathy.

At 9- and 12-months, Cathy's social behaviours score increased to 2 and remained stable. At 9-months, the MPT reported that Cathy has been attending social events at SBCS and was able to connect with others. They also reported that she had no recent service exclusions and was exhibiting insight into her behaviours. The MPT continued to provide supportive feedback to Cathy, and the reward program continued. At 12-months, the MPT reported that they would continue using the rewards program and providing positive reinforcement to Cathy for her appropriate behaviours. Cathy's MPT indicated that she is exhibiting more respectful behaviour on the phone and exhibiting greater recognition of feelings of anger.

Survival Skills

A second priority area for Cathy, set by her MPT, was her survival skills. At baseline, Cathy received a survival skills assessment score of 2. This score did not change over the 12-month period. The MPT's initial goals were to work with Cathy to assist her in understanding healthy relationships and to ensure that her basic needs were met (e.g. obtaining a bed, landline, and groceries) and to develop creative tools to help improve client engagement.

At her 3-month assessment, the MPT reported engaging with Cathy and re-establishing her relationships with several MPT members and home support workers. In addition, a funding arrangement had been made to maintain Cathy's telephone landline and to purchase a bed.

At 6-months, although Cathy did not make any movement along the Matrix, several of the goals/interventions were attained or were ongoing. The MPT reported that they continued to work with Cathy on healthy relationships and provided her with feedback on her behaviour. The MPT reported that the Psychologist was successful in re-engaging with Cathy and was meeting with her regularly. The MPT members were using the behaviour tools in informal ways to help improve engagement. Cathy continued to maintain her landline and, reportedly, was using her new bed. In addition, Cathy was able to receive additional travel funding to attend social events and programs.

At 9-months, the case manager continued to engage Cathy on a regular basis and reported that Cathy appeared to be displaying more insight and information processing around her anger. The use of reward tools continued, as did funding for travel to SBCS. The MPT reported that support workers were accompanying Cathy when shopping for food and cleaning supplies. At her 12-

month assessment, the MPT continued to provide support to Cathy through the rewards program and in direct feedback. Cathy continued to meet with the psychologist. Cathy's landline was maintained. In addition, the MPT continued to support Cathy by providing funding for taxis to SBCS and helping her shop for groceries.

Housing

Cathy's final priority area was housing. At baseline, Cathy was assigned a score of 4 out of 5. The goals initially identified by Cathy's MPT were to build a coordinated support network around Cathy so that she is able to maintain her housing and to explore funding options for more permanent housing.

At 3-months, Cathy's MPT increased her housing score to 5 out of 5, where it remained stable until the final assessment at 12 months. The MPT reported that early-stage discussions had occurred around the possibility of NLHC providing longer term housing for Cathy. Other housing options were discussed, including a support housing arrangement at a local community centre. The MPT reported that at 3-months, Cathy had maintained her housing, with support, for the previous 12 months and that she was exhibiting greater openness to receiving in-home supports.

At 6-months, the MPT reported that Cathy needed a more structured living arrangement. The team spoke to Cathy about potentially living in supported housing and a referral was made; however, Cathy was not accepted. The MPT reported that Cathy was receiving support in an independent housing environment, and that this support would follow her to her new housing, once secured.

At 9-months, the MPT reported that, since the last assessment, new housing had been secured and Cathy had moved in. The team indicated that the landlord was supportive and had had no issues were his/her new tenant. The MPT reported that the rent was significantly lower in the new housing.

At 12-months, the MPT reported that Cathy's current landlord has raised no issues to date. The MPT reported further discussions with NLHC on providing a subsidy for Cathy's housing. NLHC was reportedly open to providing a subsidy provided that the issues raised from the NLHC inspection were addressed. In addition, the MPT reported that they had developed a comprehensive support plan and were providing coordinated services for Cathy.

Other Matrix Domains

In the first three months, Cathy experienced positive movement along the matrix in the area of her mental health. The MPT reported that Cathy was engaged more with her psychologist and her DBP. At 6-months, Cathy's scores on the matrix also improved in the areas of substance abuse and transportation. The MPT reported less substance abuse, no parties, and no complaints from the landlord at the time. The MPT also indicated that Cathy used the bus and had approval for funding for taxis to aid her in accessing community programs. The MPT reported that the improvement in Cathy's access to transportation reflected on her social connectedness.

At 9-months, Cathy also saw improvements in the areas of basic needs and legal issues. The MPT reported her occasional attention to hygiene and openness to discussing her basic needs. In addition, the MPT reported that Cathy had completed probation with no new charges laid. The MPT also reported a significant decrease in the number of calls Cathy placed to the police.

Vanessa

Vanessa's baseline score on the matrix was 39 out of a possible 85. Her three priority areas included housing, mental health, and basic needs. The three main goals were to assist Vanessa in finding and maintaining more permanent housing, to continue to provide mental health support for Vanessa, and to provide support to enable her to improve her basic needs including hygiene. Vanessa's scores on the matrix are presented in Table 2.

Table 2. Vanessa: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4).

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Overall assessment score	**39**	**48**	**54**	**62**	**63**
Survival Skills	5	5	5	5	5
Basic Needs	2	5	5	5	5
Income	2	2	3	4	4
Housing	2	3	4	4	4
Food	1	1	3	4	4
Life Skills	1	2	4	4	4
Physical Health	2	4	4	5	5
Mental Health	2	2	2	3	3
Substance Abuse	4	4	4	4	4
Social Behaviors	2	4	4	5	5
Communication	3	3	3	5	5
Legal	5	5	5	5	5
Family Relations	2	2	2	3	3
Social Connectedness	2	2	2	2	2
Transportation	2	2	2	2	3
Adult Education	1	1	1	1	1

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Employment	1	1	1	1	1

Note: Priority areas highlighted in orange

At the 3-month and 6-month assessments Cathy showed an improvement in her total assessment score (48 and 54, respectively) in comparison to her baseline score of 39. Of the three priority areas identified, Cathy showed improvement in housing and basic needs.

At 9-months Vanessa's overall Assessment Matrix score increased to 62, with improvements in the areas of income, food, physical health, mental health, social behaviours, communication, and family relations. At 12-months, Vanessa's scored increased again to 63 due to improvements in her access to transportation.

Housing

One of the main concerns for Vanessa was locating and maintaining more permanent housing, as she was residing in a local shelter at the time of her initial assessment. Her baseline housing assessment score was 2, and at 3-months, her score increased to 3. At this time Vanessa's case manager was visiting her at the shelter and the MPT had regular contact with the shelter worker. The funding arrangement for Vanessa had been extended, and the MPT was exploring other housing options.

At her 6-month assessment, Vanessa's housing score moved from a 3 to a 4, where it remained stable until her last assessment at 12 months. The MPT was successful in extending Vanessa's funding until January 2012, enabling her to remain at the shelter until that time. It was noted that the team's information sharing was impacted by a lack of communication with the shelter staff member. Several days prior to the 6-month assessment, Vanessa moved into a longer-term housing arrangement at a bed and breakfast.

At the time of her 9-month assessment, the MPT reported that the case manager was meeting regularly with Vanessa in her home. In addition, the case manager was in regular contact with the landlord and caretaker of the property. The cost was lower than at the shelter and the funding arrangement between organizations was maintained. At 12-months, the connections the case manager made with Vanessa and the landlord were maintained. The MPT reported no change in the funding arrangement.

Mental Health

Vanessa's mental health score at baseline was 2 out of 5. The goals identified by the MPT were to maintain engagement with Vanessa and help educate her on resources available within the community. At 3-months, Vanessa's mental health score remained stable. The MPT reported that Vanessa was attending her psychiatry appointments, with reminders and transportation made available by her case manager. In addition, the case manager had provided Vanessa with information on the services offered by a local community organization.

At her 6-month assessment, Vanessa's score remained at 2. The case manager began meeting with Vanessa weekly in an attempt to re-establish a relationship. The case manager also assisted Vanessa in connecting with a primary healthcare clinic; however, Vanessa refused to attend. Vanessa was meeting every six weeks with her psychiatrist, who, the MPT noted, was reporting improvements.

At 9-months, Vanessa scored 3 out of 5 in the mental health domain, indicating positive movement along the matrix. The MPT reported that Vanessa's case manager had continued to maintain contact with her. A referral was made to EH's MHA Case Management Program to ensure that services would be provided to Vanessa once discharged from her current service provider. Vanessa continued to attend psychiatry appointments with assistance from her case manager. The MPT also identified community resources for Vanessa, but she expressed no desire to access further support. The MPT reported that Vanessa had shown signs of paranoid behaviour and she had chosen not to take her medication. However, it was noted that Vanessa was connected to service providers, was maintaining her housing and her cleanliness, and had made a sound decision to move into a new unit.

At 12-months, Vanessa was assigned a score of 3, indicating no movement from her previous assessment. The MPT reported that no changes had occurred in her status.

Basic Needs

Finally, the MPT identified basic needs as a priority area for Vanessa. The MPT assigned Vanessa a basic needs score of 2 at baseline. The primary goal was to provide support to Vanessa so that she could improve in areas of her basic needs, such as hygiene.

At her first 3-month assessment, Vanessa's basic needs score increased from a 2 to 5 out of 5. Her MPT noted improvements in her hygiene. Specifically, Vanessa was reported to be bathing regularly and wearing clean clothes.

At 6-months, Vanessa's assessment score remained at 5. Vanessa had responded to the shelter staff member's/ MPT member's instructions regarding cleanliness, and work around maintaining personal hygiene was ongoing. The MPT also assisted Vanessa in obtaining personal identification and shopping (however, it was noted that issues still existed with the need for certain clothing items). Vanessa was asked to take part in an occupational therapy assessment to determine her ability to live independently; however, she refused to take part. The MPT noted that Vanessa continued to show improvement in the area of basic needs and that their work with her was ongoing.

At 9- and 12-months, Vanessa maintained a score of 5 on basic needs. The MPT noted that Vanessa's basic hygiene had been maintained, she continued to keep a clean unit/room, she washed her clothes on a regular basis, and she remained engaged with the case manager. At 12-months, the MPT discussed with Vanessa the possibility of receiving home support; however, she was not interested. The case manager had arranged with home operators to check on

Vanessa's unit from time to time. Reports indicate that Vanessa was washing her own clothes and keeping her unit clean. No concerns had been raised by the landlord at this time.

Family Relations

Vanessa's family relations score was initially a 2; however, at 9-months, Vanessa's score improved to a 3. At Vanessa's 9-month assessment, the family relations domain was introduced by the MPT as a new priority area. At this time, the MPT reported that the case manager had been encouraging Vanessa to visit her daughter. At 12-months, Vanessa's MPT reported that the client had been visiting with her family on a regular basis. This score remained stable at 12-months.

Other Matrix Domains

In her first six months, Vanessa also saw positive movement along the matrix in five additional areas: life skills, food, income, physical health, and social behaviours. Her MPT reported that Vanessa was meeting her basic needs of daily living, food had been provided and she was making her own meals, there had been no change in her physical health, and that she was yelling less and acting friendly with others. However, with respect to social behaviours, the MPT reported that Vanessa was refusing some services and that client engagement varied.

At 9-months, Vanessa's assessment scores also improved in the areas of her income, food, physical health, social behaviours, and communication. Her MPT reported that Vanessa was receiving an additional $100 per month, cashing her cheques on a regular basis, and budgeting her money. The MPT also noted that Vanessa was able to shop for and prepare her own food, and that she had a fridge in her unit. The MPT reported that Vanessa was maintaining her physical health and hygiene and that she was walking regularly for exercise. Vanessa had made some social connections by this time and was getting along with her daughter. Finally, the MPT reported that Vanessa had maintained regular contact with the case manager and that she was able to communicate her needs in those meetings. The case manager noted that Vanessa was organized in her thoughts with respect to date and place.

At 12-months, Vanessa's transportation score improved. The MPT reported that transportation options are available to Vanessa, but that she chooses not to avail of them. This is thought to be due to challenges she experiences with her mental health.

Rick

At baseline, Rick scored a 31 out of the possible 75 (two domains were deemed not applicable by his MPT). The three priority areas/goals were to assist Rick in maintaining housing, stabilize his mental health status, and help provide support to improve basic needs. Rick's scores on the Assessment Matrix are presented in Table 3.

Table 3. Rick: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4).

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Overall assessment score	**31 (of 75)**	**35 (of 75)**	**43 (of 75)**	**45 (of 75)**	**40 (of 75)**
Survival Skills	3	3	4	4	4
Basic Needs	1	1	2	2	2
Income	2	2	2	2	2
Housing	2	3	4	5	1
Food*	NA	NA	NA	NA	NA
Life Skills	2	2	2	2	2
Physical Health	4	4	4	5	5
Mental Health	2	2	3	3	2
Substance Abuse	4	4	5	5	5
Social Behaviors	1	1	2	2	2
Communication	1	3	3	3	3
Legal	2	2	3	3	3
Family Relations	1	1	2	2	2
Social Connectedness	2	2	2	2	2
Transportation	3	4	4	4	4
Adult Education*	NA	NA	NA	NA	NA
Employment	1	1	1	1	1

*Assessment Matrix domains deemed not applicable to client
Note: Priority areas highlighted in orange

At the 3-month and 6-month assessment, Rick's overall assessment scores improved from baseline (from 31 to 35 and 43, respectively). In Rick's first six months in NAVNET, he showed improvement in all three priority areas.

At his 9-month assessment, Rick's overall assessment score increased to 45 and he showed improvement in the physical health and housing domains. At 12-months, Rick's total assessment score dropped to 40, attributable to decreases in his housing and mental health scores.

Basic Needs

Rick's basic needs were identified as a priority at his baseline assessment. The primary intervention involved exploring the possibility of providing Rick with home care. However, Rick refused this service, and his MPT feels that he lacks insight into the living skills required to reside independently.

At 3-months, Rick's MPT had not yet begun discussing the possibility of receiving home support, nor had they begun to explore funding options and potential home support hours. The MPT focused on Rick's other priority areas, as he remained in the hospital for the majority of the first three-month period.

At his 6-month assessment, Rick's score increased from 1 to 2. However, no indication of progress in this area was recorded in meeting notes. Rick continued to refuse home support and remained disengaged. The MPT reported that Rick has poor hygiene.

At 9-months, Rick's basic needs score remained the same. His MPT reported that he remained resistant to assistance with activities such as buying sheets. It was noted that the MPT was planning to connect with Rick's landlord in an effort to obtain his/her assistance with a reward system for Rick. It was hoped that a reward system would encourage Rick to change his sheets. The MPT did note one or two instances of Rick having washed and changed his clothes.

At 12-months, Rick's basic needs assessment score remained at 2. At this 1-year assessment, the MPT reported that Rick remained resistant to improving his personal hygiene. Similarly, the client was not interested in the gift-card reward, although the MPT did report some success here. Of note is that the client was hospitalized for much of the time between his 9 and 12-month review.

Mental Health

Stabilizing Rick's mental health status was identified as a priority area by MPT members. At baseline, Rick was assigned a mental health score of 2. Rick was in the hospital for much of the initial 3-month period. Goals included engaging with the client, improving his medication compliance, and establishing regular communication between the MPT and the landlord and Rick's psychiatrist.

At the 6-month assessment, the MPT assigned Rick a mental health score of 3. They reported that attempts to engage Rick had been made and were ongoing. In addition, medication compliance improved while Rick was in hospital, and Rick had begun receiving biweekly medication injections in the community with no resistance. The MPT's attempts to connect with the psychiatrist and the landlord were successful, evidenced by reported ongoing regular contact. In addition, the MPT reported that Rick was attending psychiatry appointments and had had no reported hospitalizations or PAU presentations since the previous assessment.

At his 9-month assessment, Rick's mental health score remained at 3. The MPT reported regular contact between the case manager and Rick. In addition, Rick was continuing to receive his bi-

weekly medication injection and was maintaining appointments with his psychiatrist. Rick received regular reminders regarding his medical appointments and also received a bus pass for transportation.

At 12-months, Rick's mental health score decreased from a 3 to a 2. Rick was admitted to the hospital prior to his 12-month assessment. Attempts have been made by his case manager to visit him at the hospital twice weekly; however, Rick does not always agree to meet with his team. Prior to his admission, Rick was compliant with receiving his injection in the community, but his oral medication compliance was unknown. His MPT also reported that Rick attended most psychiatry appointments and continued to use his bus pass for transportation.

Housing

Housing was identified as the third priority area for Rick, with aims to help Rick maintain his current board and lodging arrangement and to explore possible longer-term housing solutions. At 3-months, Rick's housing score improved from 2 at baseline to 3. The MPT reported that they had contacted various landlords and were exploring long-term housing options for Rick.

At the 6-month review, Rick's housing score increased to 4. The MPT was successful in helping Rick maintain his housing while he was in hospital. In addition, a cost sharing arrangement for Rick's housing was established and, reportedly, approved in a timely manner. Funding for Tim Horton's cards was also obtained for use as incentives by the case manager.

At 9-months, Rick was assigned a higher housing score of 5. The MPT reported that the case manager was visiting the client 2-3 times per week in his home. Client engagement work was reportedly ongoing; however, attempts to use gift cards for engagement were ineffective. The MPT reported connecting with the landlord on a regular basis and that the landlord was supportive of Rick. The MPT discussed the possibility of providing training to the landlord in ways to engage Rick. Finally, the MPT was exploring alternative emergency housing options for Rick; however, options were limited.

At 12-months, Rick's housing score dropped significantly from 5 to 1. Rick was hospitalized prior to his 12-month assessment and while he was in hospital, the landlord closed his/her house to clients. The MPT contacted an extensive list of private landlords, none of whom would rent to Rick. Rick remained in hospital at the time this report was written with no housing option established.

Other Matrix Domains

Over the 6-month period, Rick's scores improved in an additional seven areas: social behaviours, communication, family relations, legal, survival skills, transportation, and substance abuse. The MPT reported that Rick had no reported substance abuse, greater stability in his moods, more organized thinking, and no further legal involvement. At 9-months, Rick's assessment score for physical health increased. His MPT reported that his physical health had been stable for the previous twelve months.

Isobel

At baseline, Isobel scored 51 out of a possible 85. The three priority areas for Isobel were housing, substance abuse, and social behaviour. The MPT's initial goals were to assist Isobel in maintaining housing and to explore possible options for independent housing, to stabilize Isobel's medication use and compliance, and to focus on client engagement. Isobel's assessment scores are presented in Table 4.

Table 4. Isobel: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4).

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Overall assessment score	**51**	**53**	**57**	**54**	**47**
Survival Skills	4	4	4	4	4
Basic Needs	4	4	4	4	4
Income	2	2	2	2	2
Housing	1	3	4	4	4
Food	2	2	2	2	2
Life Skills	2	2	3	3	3
Physical Health	3	3	3	3	3
Mental Health	3	3	3	3	2
Substance Abuse	2	2	3	3	2
Social Behaviors	2	2	2	3	2
Communication	4	4	4	4	4
Legal	4	4	5	2	2
Family Relations	4	4	4	4	2
Social Connectedness	4	4	4	3	2
Transportation	4	4	4	4	3
Adult Education	5	5	5	5	5
Employment	1	1	1	1	1

Note: Priority areas highlighted in orange

At the 3-month and 6-month assessments Isobel showed overall improved assessment scores (53 and 57, respectively) compared to her baseline assessment score of 51. Isobel showed movement

along the matrix in two of the three priority areas and positive movement was also reported in the life skills and legal domains.

At 9-months, Isobel's total assessment score decreased to 54, with improvement in her social behaviour score, and negative movement in the areas of the legal and social connectedness domains. At 12-months her score further decreased to 47. Isobel saw decreases in her family relations, social connectedness, and transportation scores.

Housing

Housing was identified as a priority area as Isobel received an initial score of 1 at baseline. The primary goals identified were to engage Isobel and to explore independent housing options and funding arrangements. At 3-months, Isobel's housing score increased to 3. When Isobel enrolled in NAVNET she was homeless; however, within the first three months, her MPT was successful in obtaining independent housing. In addition, a cost sharing funding arrangement was negotiated in order to pay for her rent and damage deposit. The MPT reported that NLHC had become more engaged in the subsidy process and that SBCS was providing more home support for Isobel.

At 6-month's Isobel's housing score increased to 4. The MPT reported that the cost-sharing arrangement was amended to include NLHC, who approved a housing subsidy, in addition to the department of AES and EH's MHA program. The case manager met biweekly with Isobel, and members of her MPT continued to work together to assist Isobel in maintaining her housing. The MPT noted that Isobel was keeping her unit clean and that there was no threat of eviction.

At Isobel's 9-month assessment, her housing score remained stable at 4. Her MPT reported that the case manager continued to meet weekly with the client at her apartment. The case manager was working with the client to encourage her to take her garbage out and also to explore the possibility of obtaining assistance with home maintenance. At 12-months, Isobel's landlord had mowed the lawn and no progress on garbage removal was reported. Her housing score remained at 4.

Substance Abuse

Substance abuse was identified as one of Isobel's priority areas. Because Isobel presented with medication compliance/abuse issues, the MPT assigned her a score of 2 and identified the following goals: MPT members to explore with Isobel's psychiatrist the need for a review of her medication and medication schedule; and obtain a complete list of Isobel's medication use.

At her 3-month assessment, Isobel's substance abuse assessment score remained at 2. The MPT reported that the case manager had an appointment scheduled to meet with Isobel's psychiatrist. In addition, the MPT obtained a list of Isobel's prescription medication over the last two years. The MPT members reported that they feel that the psychiatrist needs to become more involved with reviewing Isobel's medications.

At 6-months, Isobel's substance abuse score increased positively to 3. The MPT reported having maintained ongoing communication with the psychiatrist. The case manager had also been educating Isobel on the importance of medication compliance and scheduling, including side effects, dosage and alternative administration options. It was noted that Isobel was following through with her appointments, had increased her interactions with SBCS staff, and was slightly more stable as a result of changes in her medications. However, she remained uninterested in receiving support for her substance abuse issues.

At 9-months, Isobel's score remained at 3. Within the 6- to 9-month period, Isobel was violent towards a staff member at SBCS. As a result, her access to their services was restricted and she was not able to attend SBCS to receive her medication. However, the case manager worked with the pharmacist to ensure her medication could be dispensed daily. The case manager had also attempted to provide Isobel with information about her medication and its potential side effects; however, with the prohibition of office visits, progress was minimal during the three-month period. Isobel's psychiatrist was made aware of her behaviour and its consequences in relation to her care.

At Isobel's 12-month assessment, Isobel's score decreased to 2. Progress notes indicate that Isobel was still restricted from visiting SBCS. Reports indicate that the pharmacy delivers her medication on occasion. The case manager continues to remain in contact with Isobel and speaks with her regarding medication compliance and coping mechanisms. The case manager is no longer in contact with Isobel's psychiatrist as the client does not want the case manager involved in her psychiatric care.

Social Behaviours

The final priority area for Isobel was her social behaviours. Isobel was initially assessed a score of 2 and did not make movement on this domain over her initial 6-month involvement with NAVNET. During this time, Isobel's case manager discussed the possibility of Isobel participating in social activities.

At the time of the 3-month assessment, the MPT reported that Isobel had not made any changes and that issues concerning her social behaviours were closely tied to her substance abuse. At the 6-month assessment, Isobel's MPT reported that she was displaying less anger and more insight into her behaviours.

At Isobel's 9-month assessment, Isobel's social behaviours score increased to 3. The MPT reported that Isobel's case manager was meeting with her on a regular basis. The case manager discussed with Isobel the triggers that impact her behaviour; however, it was reported that Isobel shows little insight and denied the recent assault.

At 12-months, Isobel's score decreased to a 2. Her MPT reports that she continues to show little insight into her violent behaviour. In addition, Isobel missed a court date.

Life Skills

The life skills domain was added as a new priority area for Isobel at her 9-month assessment. At the time of her 9-month assessment, Isobel was assigned a score of 3. No movement occurred over the following three months. The case manager was working with Isobel to develop skills associated with shopping, budgeting, household chores, etc. At the time of her 12-month assessment, Isobel was reportedly rarely home, making the task of working with Isobel on life skills challenging.

Other Matrix Domains

Over the first 6-month period that Isobel was enrolled in NAVNET, she reportedly demonstrated improvements in her life skills and legal issues. For example, Isobel opened a bank account, located a hair salon, arranged for her medications to be changed, and found a community centre.

Between the 6- and 9-month assessment periods, Isobel's score in the legal domain decreased from 5 to 2. This decrease is associated with her assault of a staff member at the SBCS and outstanding charges. Isobel's social connectedness score dropped from 4 to 3 during this time as well. She was discharged from a therapeutic recreation program for poor attendance and was on service restriction from her primary community support organization.

Isobel also showed a decrease in the following areas: mental health, family relations, social connectedness, and transportation. Her MPT reported that Isobel was detached from seeing the case manager. In addition, Isobel is not keeping other appointments and continues to have low insight into medication misuse. The MPT reports that her family supports do not get along with one another and that they lack the resources to help. The MPT also indicated that Isobel is more socially isolated due to the restrictions placed on her access to SBCS. In addition, the MPT reported that Isobel has obtained a bus pass each month, but has continually misplaced it.

Nigel

Nigel was enrolled in NAVNET in March 2012. Because of his relatively recent enrollment, the MPT has conducted a total of three assessments: baseline, 3-months, and 6-months (see Table 5). His total baseline score on the matrix is 49 out of a possible 85. The three priority areas identified by his MPT were housing, mental health, and life skills.

Table 5. Nigel: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), and 6-months (T_2)

Assessment Matrix Scores	T_0	T_1	T_2
Overall assessment score	**49**	**48**	**52**
Survival Skills	3	3	3
Basic Needs	3	3	3
Income	2	2	2

Assessment Matrix Scores	T_0	T_1	T_2
Housing	2	2	4
Food	3	3	3
Life Skills	2	2	2
Physical Health	4	4	4
Mental Health	3	3	3
Substance Abuse	3	3	3
Social Behaviors	3	3	3
Communication	4	4	4
Legal	4	2	2
Family Relations	1	1	2
Social Connectedness	3	4	5
Transportation	4	4	4
Adult Education	4	4	4
Employment	1	1	1

Note: Priority areas highlighted in orange

At the 3-month assessment, Nigel's total score decreased from 49 to 48 due to a decrease in the legal domain score. At this time, Nigel had pending legal charges. In the final three months of Nigel's six-month involvement, his total assessment score rose to 52. This was largely due to an increase in housing and social connectedness scores.

Housing

At the time of his baseline assessment, Nigel was residing in a temporary emergency shelter. The goals of the MPT were to secure safe, appropriate housing with support staff and to explore funding options for longer-term housing.

In the first six months of Nigel's involvement in NAVNET, his housing score increased from 2 to 4. Although Nigel remained in the shelter, a longer term arrangement with the shelter was established. The MPT reported that this arrangement provided Nigel with the necessary stability and support. The MPT was successful in securing funding for support workers who will provide Nigel with support for 16 hours/week. The costs associated with this housing arrangement will be shared between EH's CSP and the Department of AES.

Mental Health

Nigel received a mental health score of 3 at baseline and this remained stable throughout his 6-month involvement. The goals indentified by his MPT included the development of a wellness

support plan; assisting Nigel in connecting with a variety of professionals who will assist him in improving his mental health; and educating and supporting Nigel in pursuing various employment, volunteer or community inclusion options. In relation to the initial goals set, MPT meeting notes indicate that Nigel is seeing a psychologist, a DBP and a general practitioner regularly. Shelter staff members report that they occasionally need to remind Nigel to attend his medical appointments and to take his medication. Nigel has a history of self-harm, and the MPT reported fewer incidences of self-harm over the six-month period.

Life Skills

Finally, the MPT aims to assist Nigel in developing and enhancing his life skills by increasing his activities and encouraging his independence. Nigel was initially assessed at a score of 2 and this remained unchanged over the 6-month period. Nigel has been receiving support from one support worker and more have been hired to assist him. Staff members at the shelter have also been assisting Nigel with improving his life skills.

Other Matrix Domains

During the 6-month period that he has been involved with NAVNET, Nigel's assessment scores have improved in family relations and social connectedness. Nigel's MPT indicated that in the last three months of his involvement, Nigel has reestablished some relationships with his family members. In addition, Nigel has taken part in activities within the community and he is involved in a sports group.

Jarrod

At baseline, Jarrod received a total score of 48 out of the possible 85. The priority areas were identified as employment, social behaviours, and housing. The short-term goals were locating and funding independent housing, exploring potential education/employment opportunities, and helping Jarrod improve his social behaviours. Jarrod's scores on the matrix are presented in Table 6.

Table 6. Jarrod: Client assessment matrix scores at Baseline (T_0), 3-months (T_1), 6-months (T_2), 9-months (T_3), and 12-months (T_4).

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Overall assessment score	**48**	**55**	NA*	NA*	NA*
Survival Skills	3	4	NA	NA	NA
Basic Needs	3	4	NA	NA	NA
Income	2	2	NA	NA	NA
Housing	2	3	NA	NA	NA

Assessment Matrix Scores	T_0	T_1	T_2	T_3	T_4
Food	2	2	NA	NA	NA
Life Skills	2	3	NA	NA	NA
Physical Health	4	4	NA	NA	NA
Mental Health	4	4	NA	NA	NA
Substance Abuse	3	2	NA	NA	NA
Social Behaviors	2	4	NA	NA	NA
Communication	3	3	NA	NA	NA
Legal	3	2	NA	NA	NA
Family Relations	2	2	NA	NA	NA
Social Connectedness	4	5	NA	NA	NA
Transportation	4	5	NA	NA	NA
Adult Education	4	4	NA	NA	NA
Employment	1	2	NA	NA	NA

*Client incarcerated
Note: Priority areas highlighted in orange

At the 3-month assessment (T_1), the team assessed Jarrod as having moved in a positive direction in all three of the priority areas identified (i.e., employment, social behaviours and housing). Overall, his assessment score increased from 48 to 55.

Employment

At 3-months, Jarrod's employment score increased from 1 to 2 on the Assessment Matrix. Specific interventions that were completed or ongoing at the time included the case manager meeting regularly with Jarrod to discuss employment opportunities; the probation officer exploring the option of enrolling Jarrod in a community based employment program (although the client did not attend); discussing the benefits of certificate training, with Jarrod signing up for two certificate courses (although the client did not complete training); the case manager supporting Jarrod in attending programs (the client attended one program/event); and supporting Jarrod in developing employment skills (e.g., resume writing, hygiene, etc). Jarrod completed a resume and the MPT noted improved hygiene and appearance.

Social Behaviours

The greatest gains observed in Jarrod's 3-month involvement were his social behaviours. Jarrod moved from a score of 2 at baseline to 5 at the 3-month review. The team's primary goal was to provide Jarrod with ongoing support to allow him to explore alternatives to his current behaviour patterns. Specific interventions included discussing with Jarrod the option of therapy to help

explore patterns of behaviour, assisting Jarrod with finding and connecting with a therapist, and exploring the possibility of enrolling in an Anger Management Program. At the 3-month review it was noted that these interventions were ongoing. At that point in time, Jarrod was in custody but was still intending to take part in therapy and Anger Management.

Housing

The third priority area for Jarrod was housing. At the 3-month review he moved from a score of 2 at baseline to 3. Several goals were identified including exploring possible options for independent housing, exploring funding options, and providing the necessary support to assist Jarrod in maintaining his housing. Over the 3-months, Jarrod was able to secure independent housing. In addition, the MPT successfully explored funding options for Jarrod's housing, with the NLHC having commenced their process of providing a subsidy. Finally the MPT members reported that they were providing the necessary support to assist Jarrod in maintaining his housing.

Other Matrix Domains

Additional goals and interventions for Jarrod included identifying food sources within the community, ensuring that he had bus passes and could access community resources as needed, and assisting Jarrod with life-skill development (e.g., cooking, budgeting, and paying bills). Jarrod made progress on the matrix in the areas of life skills, survival skills, basic needs, social connectedness, and transportation. Jarrod's scores on the matrix decreased in the areas of substance abuse and legal issues. Jarrod's 3-month assessment was completed while he was in custody. Prior to the 6-month assessment, Jarrod's file was transferred to an inactive status and as such, his 6-month assessment was not conducted. Since this time, Jarrod was charged with a criminal offense.

3.2.3 Summary of Client Goals, Interventions and Assessment Matrix Scores

- MPT members assessed clients at baseline and every three months using the NAVNET Assessment Matrix tool. The tool measures progress in 17 domains on a 5-point scale, ranging from 1 to 5, with higher scores representing greater or more positive functioning.
- Three of the five clients have been enrolled in NAVNET for a full year and were assessed using the Matrix on five occasions. Due to a shorter period of involvement, two clients have fewer assessment scores.
- At the time or enrollment, total scores ranged from 35 to 51 out of a possible 85.
- At the time of their final assessment, 5 of the 6 clients had higher scores than at baseline.
- The greatest positive movement along the Matrix was experienced by Vanessa who moved from a total score of 39 to 63 twelve months later. Her greatest gains were in the area of basic needs, housing, and physical health.

- The greatest decline in total Matrix scores occurred for Isobel. During the last half of her 1-year involvement in NAVNET, her total score decreased from 57 to 47. Although her scores had increased in the domains of housing and life skills, she experienced deterioration in family relations, social connectedness, mental health, and legal issues.
- All six clients showed improvements in their housing. Many of the MPT members' activities revolved around maintaining or finding housing for the clients. Several of the clients maintained housing for relatively long periods of time during their involvement in NAVNET.
- During the demonstration project, funding for the clients' rent/shelter stays has largely been provided by both the Department of AES and EH's MHA or CSP. NLHC also provided rent subsidies for two clients.
- Several of the clients evidenced increased engagement with their service providers and increased involvement in community/hospital-based activities. Other clients' engagement remained low or decreased over the course of the demonstration. These clients showed declines in their Assessment Matrix scores in the last few months of the 1-year demonstration.
- Three of the clients experienced decreases (negative movement) in the legal domain.

3.3 Client Service Utilization and Cost of Services

3.3.1 Method

Client service utilization data were obtained for five[5] of the six clients from AES, EH, and the DOJ. The utilization (frequency and duration) and direct costs data were collected, where available, for a two-year period prior to each client's enrollment with NAVNET and for the duration of the 1-year demonstration project (or 6-months in the case of one client): EH inpatient hospital-bed days, EH Emergency Department (ED) presentations and Mobile Crisis Response (MCR) (data obtained from EH's Medical Records); provincial incarcerations and probation (data obtained from the DOJ); St. John's emergency shelters, St. John's emergency housing, private landlord accommodations, and relocations (data obtained from AES).

3.3.2 Results

One of the goals of NAVNET is to reduce client utilization of hospital services and emergency housing/shelters and client involvement in the justice system. As such, the evaluation includes a

[5] At the time of the evaluation, one of the client's involvement with NAVNET was uncertain due to his incarceration, and thus, he was excluded from the cost component.

comparison of service utilization, and associated costs, prior to and during each client's involvement with NAVNET. In addition, NAVNET aimed to improve the clients' housing stability. Thus, the approximate number of housing relocations is presented for each client (see Tables 13, 16, 20, 24, & 27). Where available, these data include moves from emergency shelters accommodations, apartments, board-and-lodging arrangements, and accommodations provided by friends/family ("couch-surfing").

With the exception of one client who has been enrolled in NAVNET for six months, each client's utilization data are presented graphically for *two years* prior to their enrollment in NAVNET and *one year* during their involvement in NAVNET (see Figures 6-8, 10-11, 13-15, 17-19, & 21-22). A 2-year baseline period was chosen to examine potential trends that may inform the interpretation of utilization patterns during the clients' enrollment in NAVNET.

In addition, bar graphs depicting total service utilization *1-year* before and during NAVNET are provided for each client (see Figures 5, 9, 12, 16, & 20). These figures are accompanied by the Tables 7-19, which contain clients' service utilization, direct costs, change in costs and percent change in costs for the *1-year* period prior to and during NAVNET (note that Nigel's utilization period spans *six months* before and during NAVNET). Finally, the total costs, and percent change in costs, for the *1-year* period prior to and during NAVNET, by service, can be seen in Tables 7-9 and Figures 2-4.

An average cost per client visit or inpatient day was obtained for each hospital department/unit. Because the health utilization costs changed over time, average costs were calculated (for each department/unit) for the three fiscal years (2010-11, 2011-12, 2012-13) that spanned the 2-year appraisal period (2011-2012). This was done in an effort to control for changes over time in the costs of services that are unrelated to the client. The average direct costs for days spent on probation and days incarcerated did not change over the appraisal period. In some cases, the housing/emergency shelter costs changed over time, particularly for rental properties. However, since these changes may relate to the client, an average cost over the appraisal period was not used.

It is possible that the healthcare and criminal justice figures underestimate the true costs to EH and the DOJ as they do not take into account the higher costs associated with providing extra support and services to clients with complex needs. In addition, the analysis does not account for all client-related costs, such as those associated with the provision of services through NAVNET. The clients also represent a small sample and are highly variable in their service utilization. Therefore, conclusions and generalizations regarding potential cost savings/increases resulting from NAVNET should be drawn with caution.

3.3.2.1 Total Utilization Costs

Change in Total Healthcare Utilization Costs

In total, there was a slight increase in the clients' frequency of ED visits during their enrollment in NAVNET compared to the same time period immediately prior to their enrollment. Thus, costs associated with ED utilization increased slightly by $3,909 or 15.4%. In contrast, the total

number of inpatient days during NAVNET decreased and associated costs decreased by $78,458 or 43.4%. MCR utilization was low both prior to and during NAVNET (two and one visits, respectively). The reduction in MCR utilization during NAVNET represents a 50% reduction in costs. Total healthcare costs decreased by $75,160 or 36.2% during the clients' enrollment in NAVNET (see Figure 2 and Table 7).

Figure 2. Changes in total costs associated with healthcare utilization

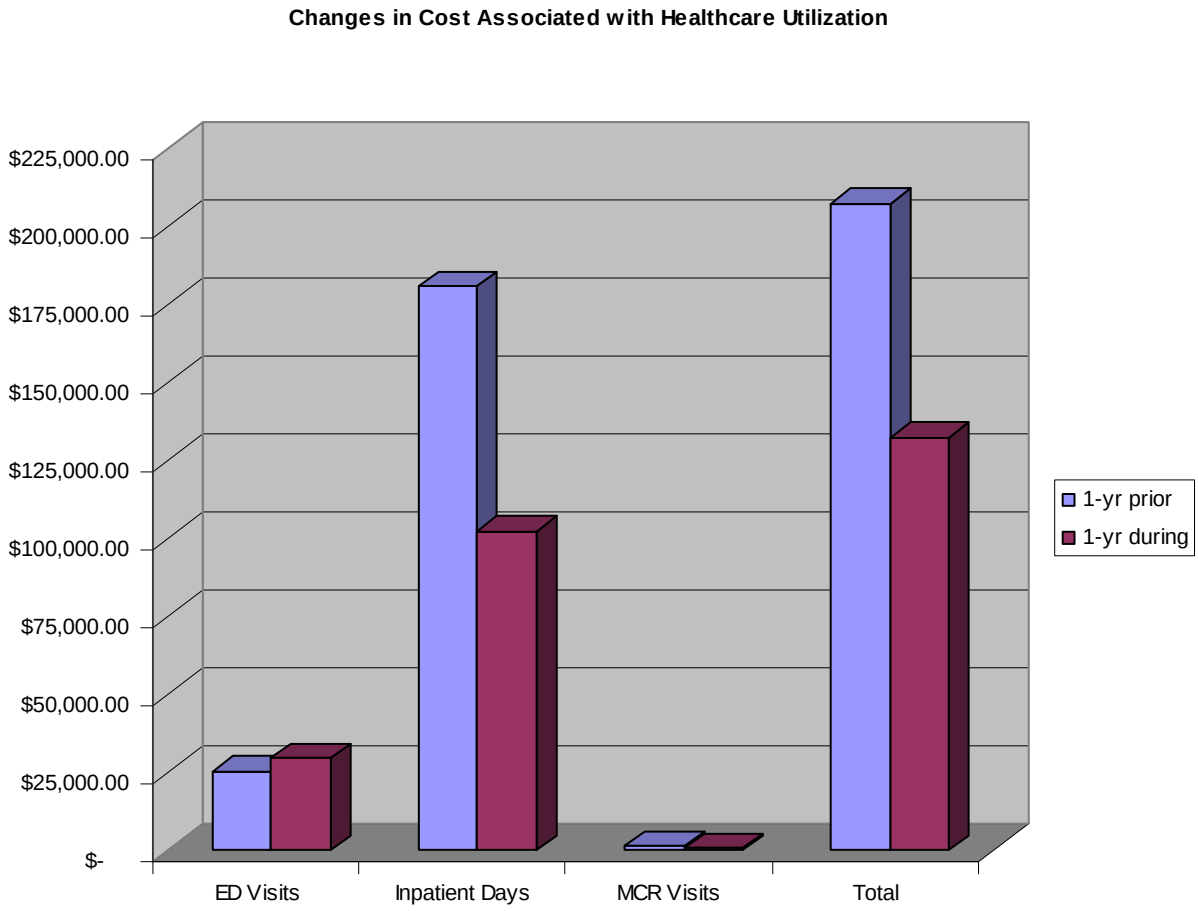


Table 7. Total cost of healthcare utilization for 1-year prior to and 1-year during NAVNET

	Before	During	Change in Cost*	Percent change*
ED visits	$25,454.96	$29,364.85	$3,909.89	15.4%
Inpatient days	$180,898.19	$102,439.84	-$78,458.35	-43.4%
Mobile Crisis Response Team	$1,224.04	$612.02	-$612.02	-50.0%
Total cost	**$207,577.19**	**$132,416.71**	**-$75,160.48**	**-36.2%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.

Change in Total Justice Utilization Costs

None of the clients spent time incarcerated during the 1-year period (6-month period for Nigel) prior to and during NAVNET. The total number of client probation days decreased slightly during their enrollment with NAVNET and associated costs decreased by 7.4% (see Figure 3 and Table 8).

Figure 3. Changes in total costs associated with involvement in the criminal justice system

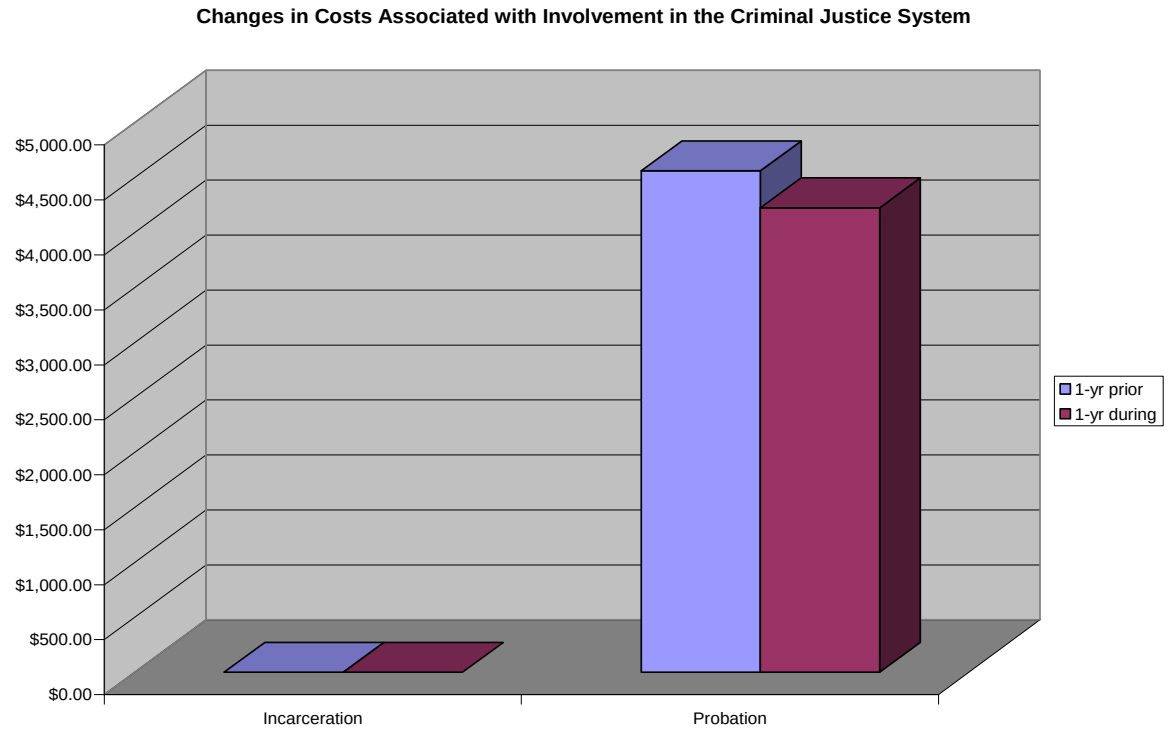


Table 8. Total cost of involvement in the criminal justice system for 1-year prior to and 1-year during NAVNET

Days spent:	Before	During	Change in Cost*	Percent change*
Incarcerated	$0.00	$0.00	0.0	0.0%
On probation	$4,560.00	$4,224.00	-$336.00	-7.4%
Total cost	**$4,560.00**	**$4,224.00**	**-$336.00**	**-7.4%**

* Negative values represent a decrease in costs incurred during the NAVNET period.

Change in Total Accommodations Costs

In total, during the clients' enrollment in NAVNET, the costs associated with emergency accommodations deceased slightly by 8%. Total costs for private landlord apartments and B/L arrangements increased by $31,304 or 73.2% during the NAVNET demonstration period. Thus, total accommodation costs increased by $27,084 or 28.3% during NAVNET (see Figure 4 and Table 9).

Figure 4. Changes in total costs associated with housing accommodations

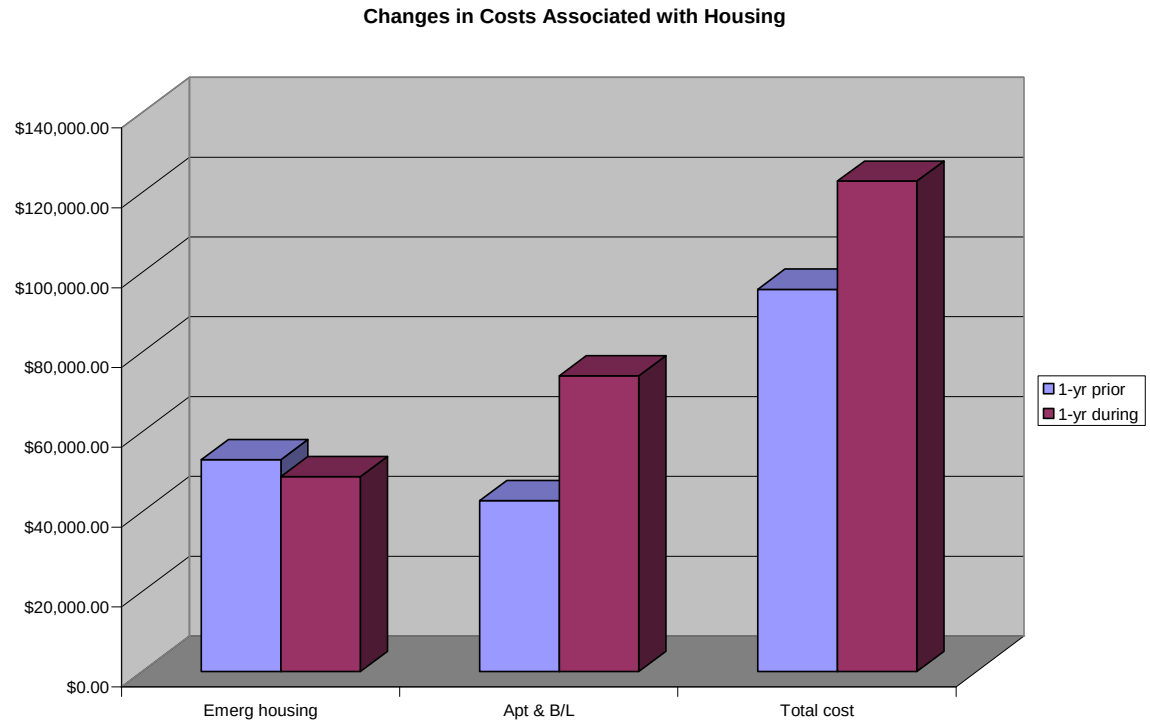


Table 9. Total cost of housing accommodations for 1-year prior to and 1-year during NAVNET

Days spent in:	Before	During	Change in Cost*	Percent change*
Emergency Housing	$53,022.00	$48,801.92	-$4,220.08	-8.0%
Apts and B/L	$42,769.06	$74,073.73	$31,304.67	73.2%
Total cost	**$95,791.06**	**$122,875.65**	**$27,084.59**	**28.3%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.

3.3.2.2 Individual Client Utilization and Cost of Services

Cathy

Figure 5 illustrates Cathy's healthcare, justice, and housing service utilization 1-year prior to and during NAVNET.

Figure 5. Cathy: Service utilization before and during NAVNET

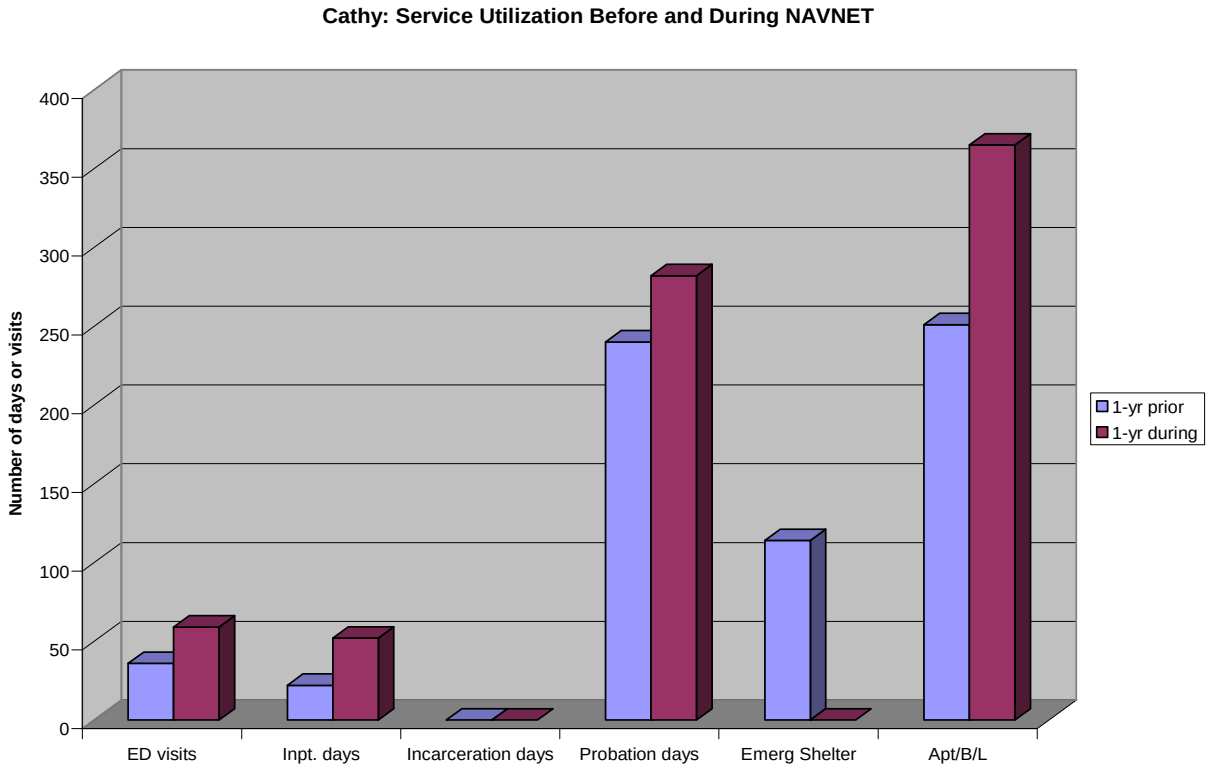


Figure 6 and Table 10 presents Cathy's healthcare service utilization. Compared to the 1-year prior to NAVNET, during NAVNET, Cathy's presentations to the ED increased from 36 to 59. This represents an increase of 56.3%. Similarly, Cathy's total inpatient days increased from 22 to 52 days, resulting in an increase of 68.8%. In general, Cathy saw a total increase in healthcare utilization costs of 65.5% or $15,714 during her 1-year enrollment in NAVNET.

Figure 6. Cathy: Healthcare service utilization

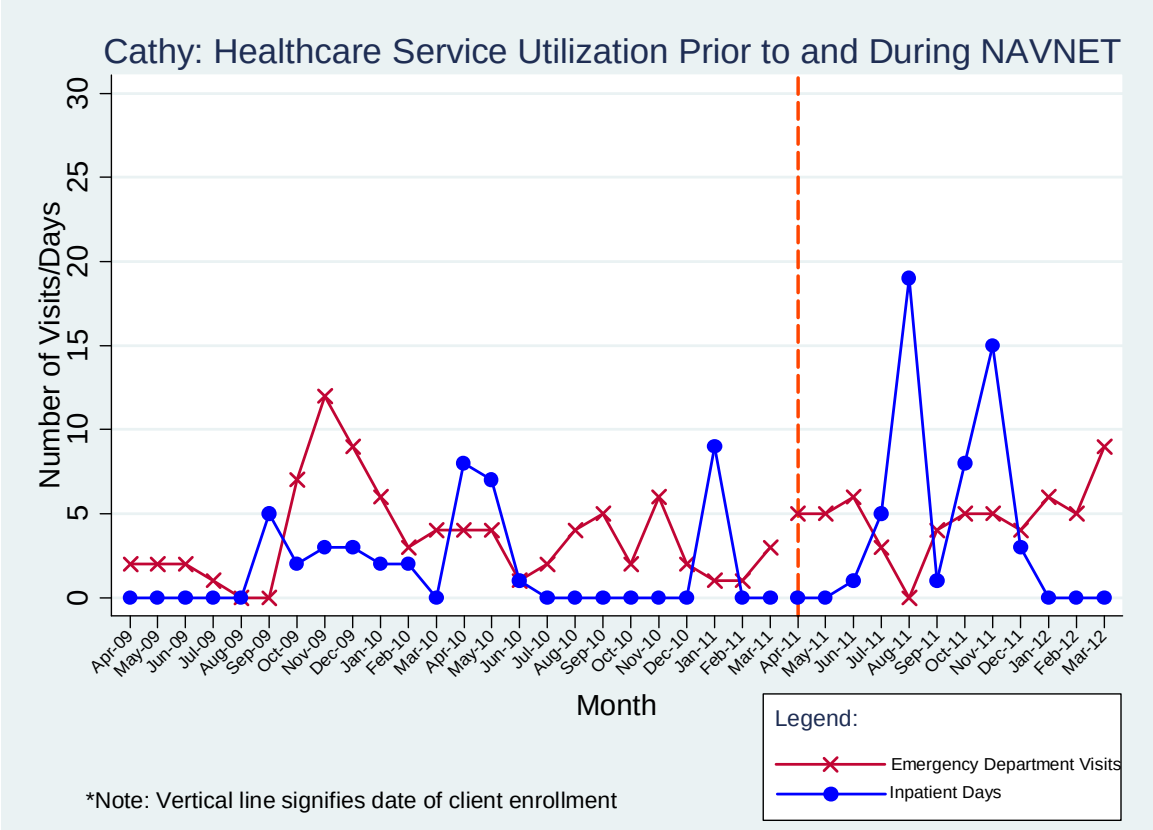


Table 10. Cathy: Healthcare service utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Healthcare service	Visits / Inpatient Days	Total Cost ŧ	Visits / Inpatient Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total ED visits	36		59			56.3%
Total Inpatient Days	22		52			68.8%
		$23,973.40		**$39,687.94**	**$15,714.54**	**65.5%**

*Positive values represent an increase in costs incurred during the NAVNET period.
ŧ Costs have been removed

Cathy's second probationary period began prior to her enrollment in NAVNET and continued for 282 days during NAVNET (see Figure 7). Thus, during her enrollment in NAVNET, there was a slight increase in costs associated with her probation. Cathy spent no time incarcerated in the 1-year prior to and during NAVNET (see Table 11).

Figure 7. Cathy: Involvement in the criminal justice system

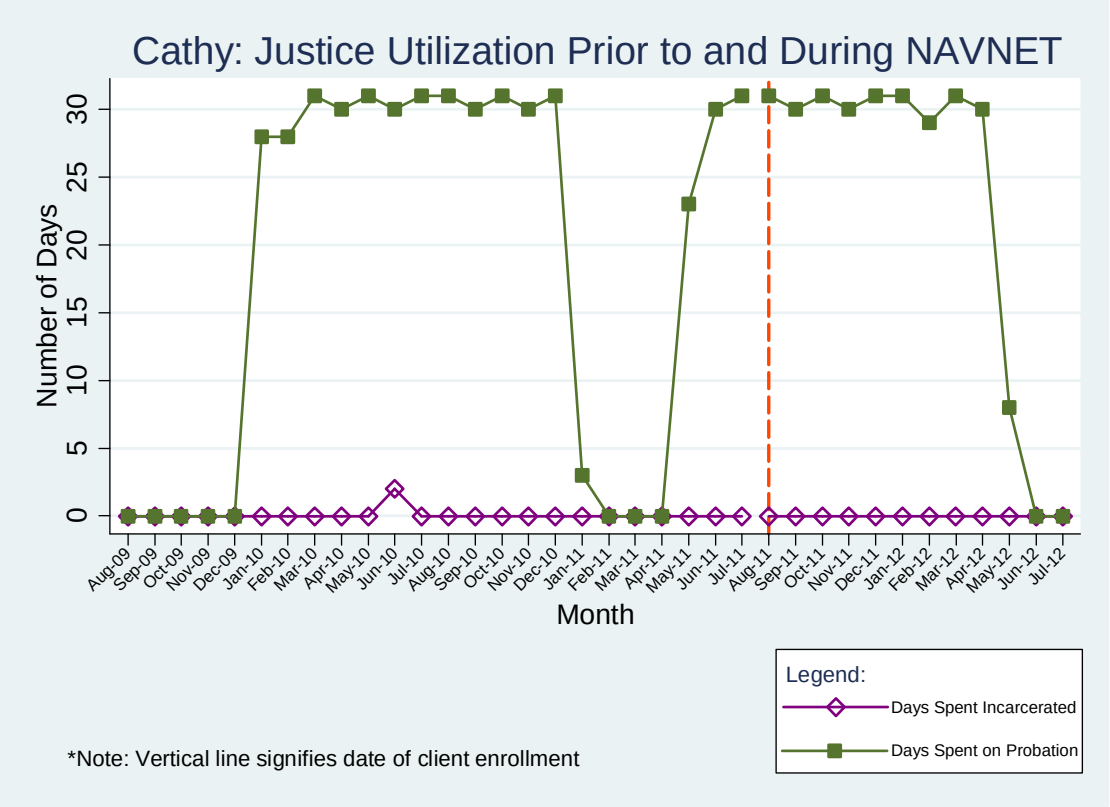


Table 11. Cathy: Justice system utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Justice system	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Incarceration	0		0			0.0%
Probation	240		282			17.5%
Total Costs						**17.5%**

*Positive values represent an increase in costs incurred during the NAVNET period.
ŧ Costs have been removed

In the 1-year prior to NAVNET, Cathy moved into a private housing accommodation; consequently, she saw a decrease in utilization of emergency shelter accommodations (see Figure 8). This resulted in a 100% reduction in emergency housing costs (see Table 12) during her involvement with NAVNET. During her time with NAVNET, Cathy's total costs for private landlord accommodations increased by 29.4% compared to the 1-year prior. Cathy moved once during her enrollment with NAVNET (see Table 13).

Figure 8. Cathy: Housing accommodations

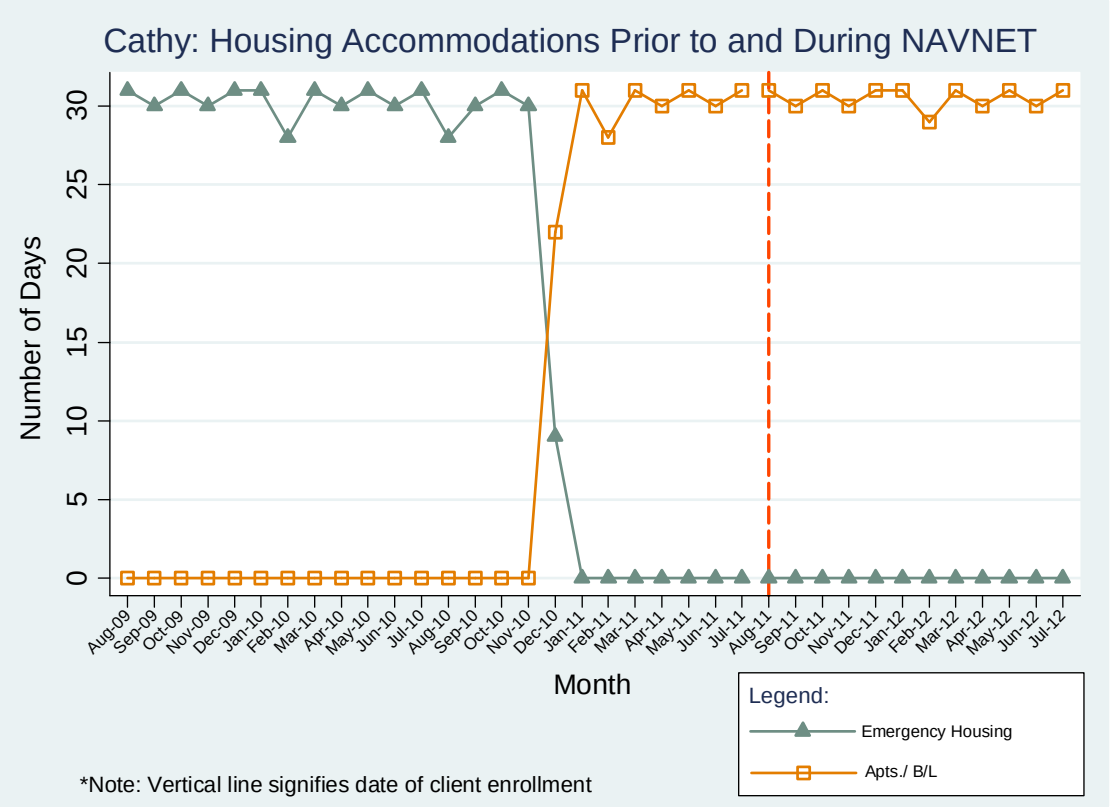


Table 12. Cathy: Housing accommodation utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Accommodation	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total Emergency Housing	114		0			-100.0%
Total Apartment	251		365			29.3%
Total Costs		**$42,087.00**		**$32,450.00**	**-$9,637.00**	**-22.9%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

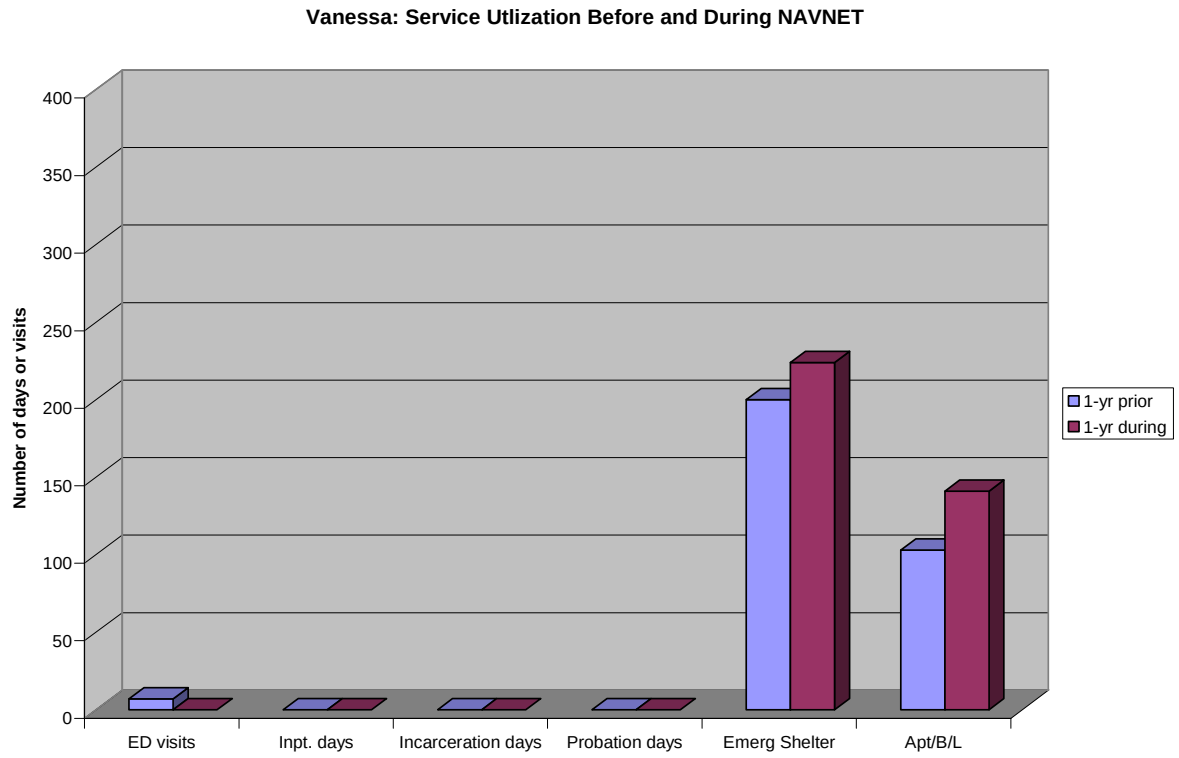
Table 13. Cathy: Number of housing relocations

	1-year before	1-year during
Number of housing relocations	3	1

Vanessa

Figure 9 illustrates Vanessa's healthcare, justice, and housing service utilization 1-year prior to and during NAVNET.

Figure 9. Vanessa: Service utilization before and during NAVNET



Vanessa's healthcare service utilization was low both prior to and during NAVNET (see Figure 10 and Table 14). Her ED presentations decreased from 7 to 0 during her 1-year enrollment in NAVNET, resulting in a 100% decrease in associated costs. Vanessa had no inpatient days in the 1-year prior to and during NAVNET.

Figure 10. Vanessa: Healthcare service utilization

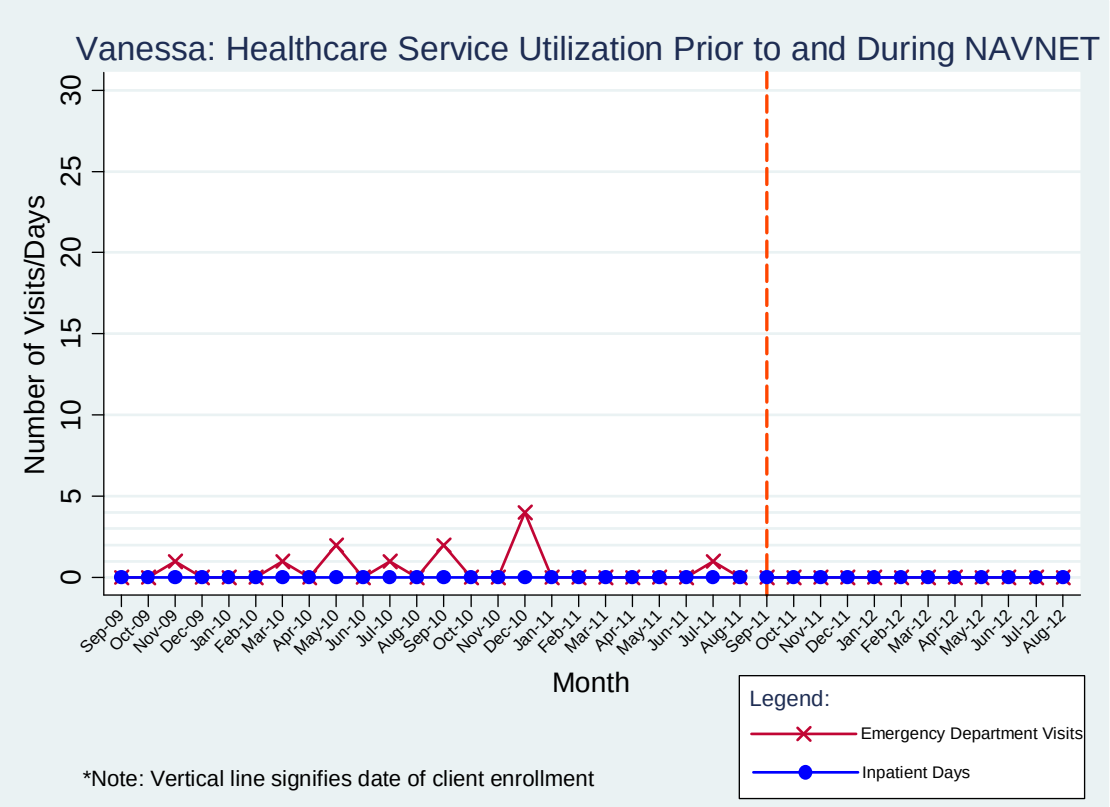


Table 14. Vanessa: Healthcare service utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Location	Visits / Inpatient Days	Total Cost ŧ	Visits / Inpatient Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total ED Visits	7		0			-100.00%
						-100.00%

*Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

In the 1-year prior to NAVNET Vanessa spent 200 days in emergency accommodations (see Figure 11 and Table 15). This continued until approximately 7 months after her enrollment when the MPT members found Vanessa a room in a B&B, where she remains. During her enrollment, Vanessa's utilization of emergency accommodations increased by 24 days, increasing costs by 14.9%. Vanessa also spent 38 more days in private landlord accommodations, increasing costs by 173.8%. Vanessa's total housing costs increased by 36.6% or $6,891. Vanessa moved once during her involvement with NAVNET (see Table 16).

Figure 11. Vanessa: Housing accommodations

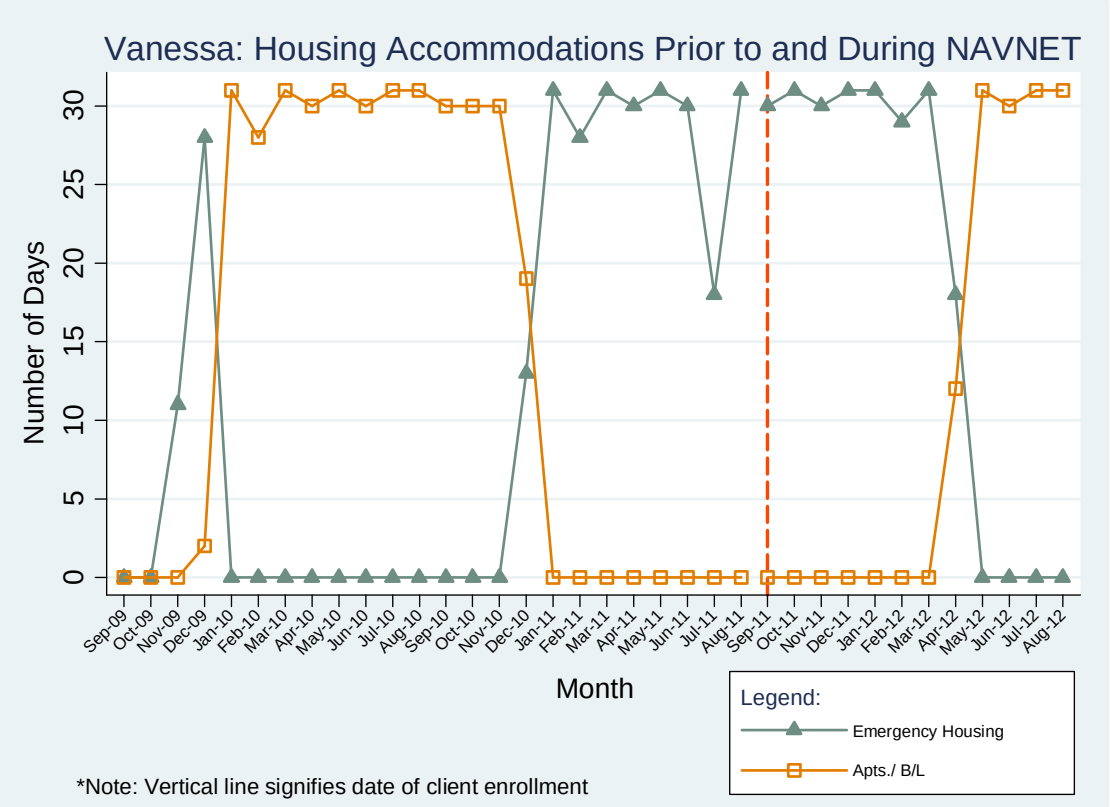


Table 15. Vanessa: Accommodation utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Accommodation	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total Emergency Housing	200		224			14.9%
Total Apartment	103		141			173.8%
		$18,824.00		**$25,715.92**	**$6,891.92**	**36.6%**

*Positive values represent an **increase** in costs incurred during the NAVNET period.
ŧ Costs have been removed

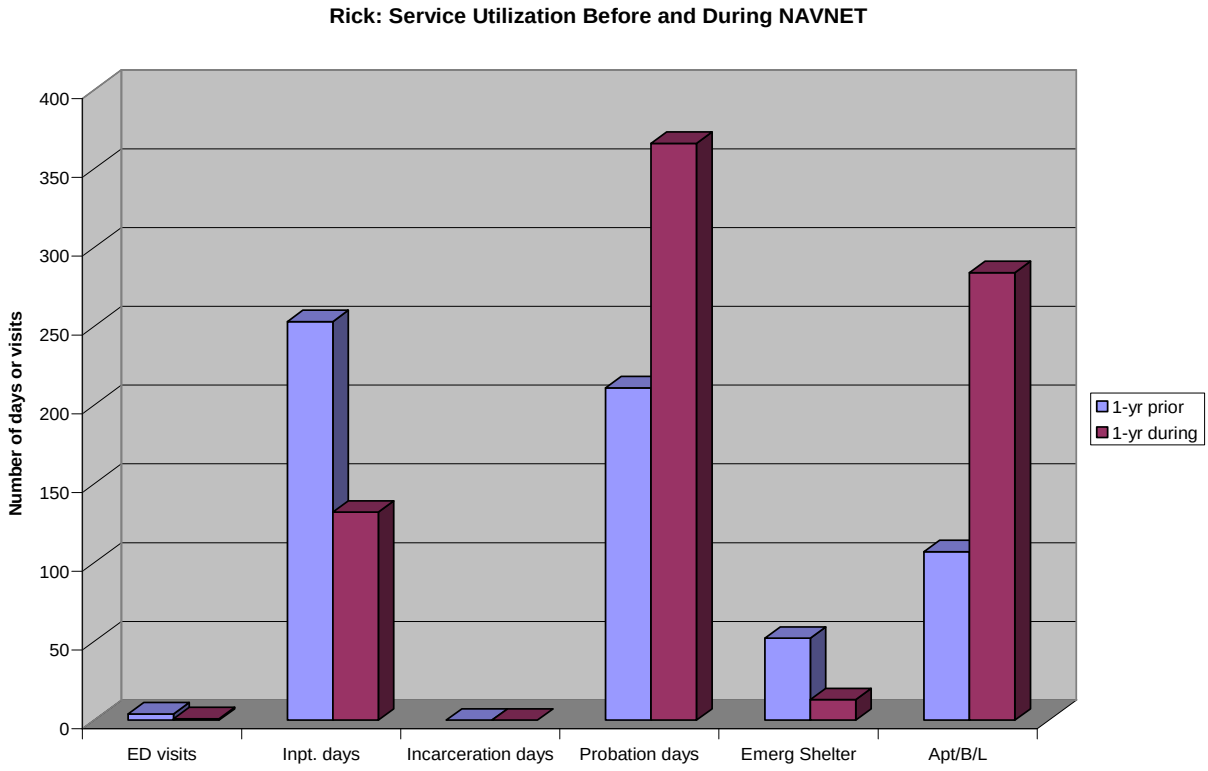
Table 16. Vanessa: Number of housing relocations

	1-year before	1-year during
Number of relocations	2	1

Rick

Figure 12 illustrates Rick's healthcare, justice, and housing service utilization 1-year prior to and during NAVNET.

Figure 12. Rick: Service utilization before and during NAVNET



Rick experienced a decrease in inpatient days from 253 in the 1-year prior to NAVNET to 132 during the 1-year enrollment in NAVNET (see Figure 13 and Table 17). This resulted in a decrease in costs of 49.4%. Rick's ED presentations also decreased from four to one during NAVNET, resulting in a 69.8% decrease in costs. During his enrollment in NAVNET, Rick's overall healthcare costs decreased by 49.4% or $68,676.

Figure 13. Rick: Healthcare service utilization

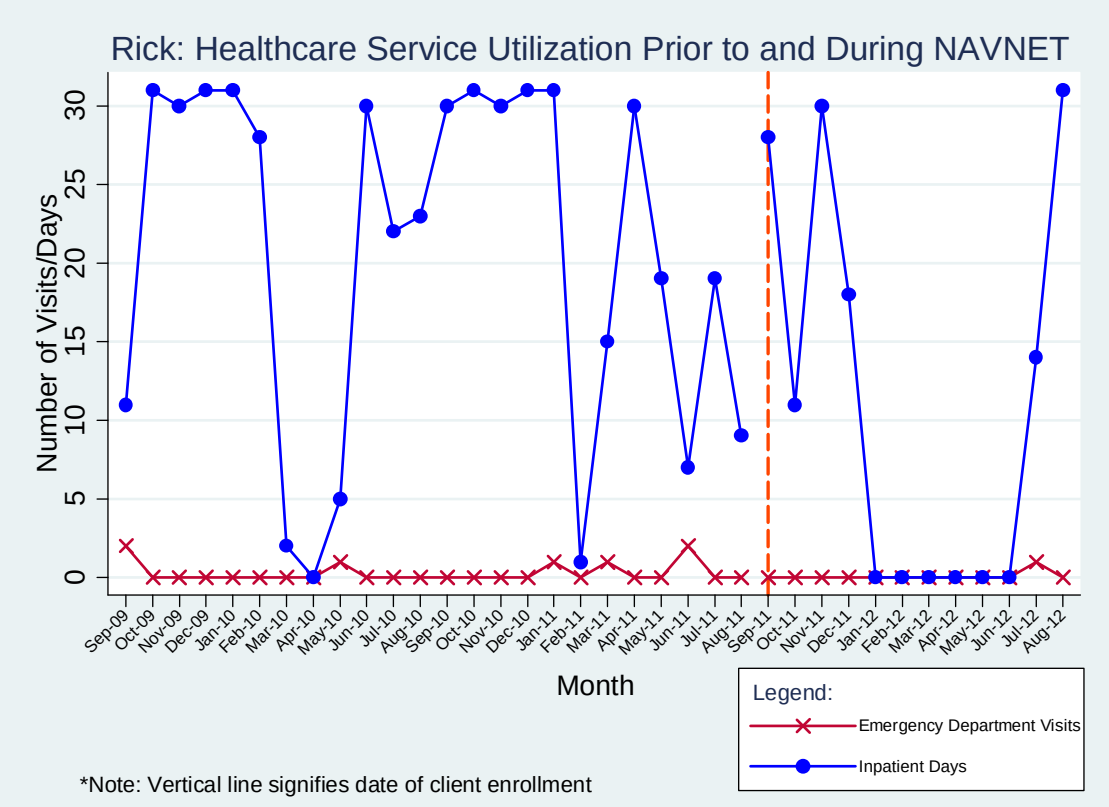


Table 17. Rick: Healthcare service utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Location	Visits / Inpatient Days	Total Cost ŧ	Visits / Inpatient Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total ED Visits	4		1			-69.8%
Total Inpatient Days	253		132			-49.4%
Total MCR	1		1			0.0%
		$138,961.08		**$70,284.90**	**-$68,676.18**	**-49.4%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

Rick's probationary period began prior to his enrollment in NAVNET and continued for the entire year he was involved in NAVNET (see Figure 14). There was a 73.5% increase in costs associated with his probation. Rick spent no time incarcerated in the 1-year prior to and during NAVNET (see Table 18).

Figure 14. Rick: Involvement in the criminal justice system

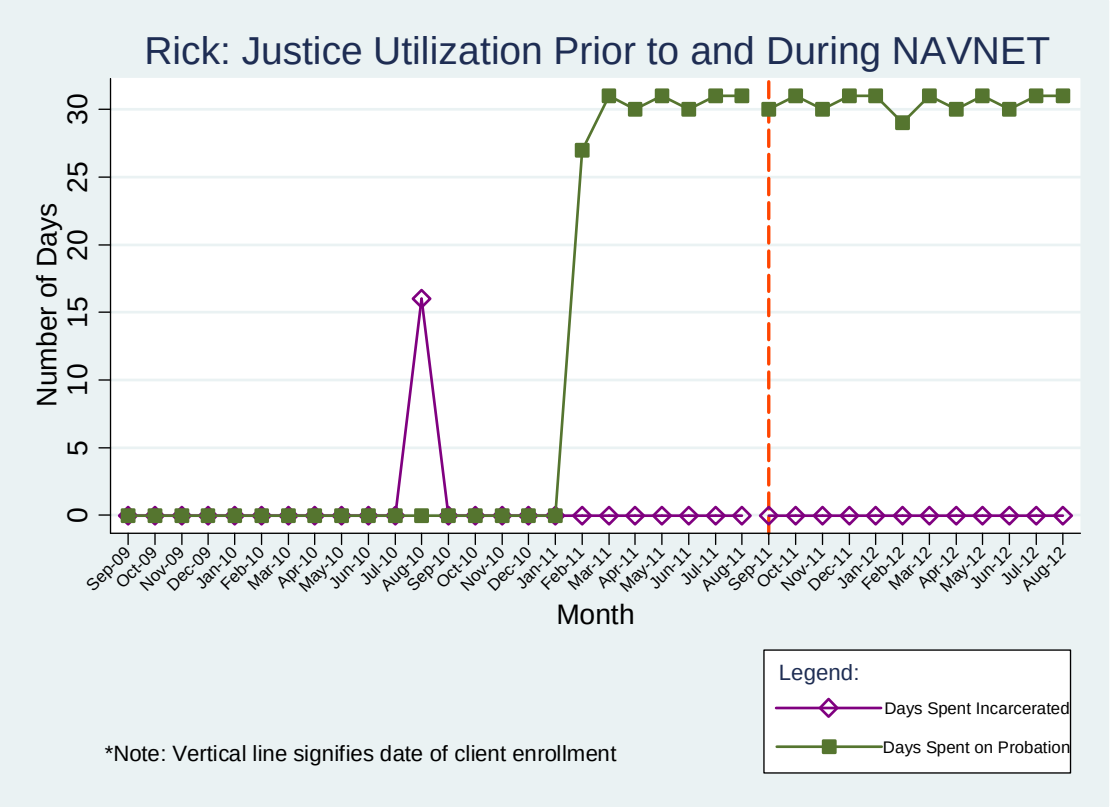


Table 18. Rick: Justice system utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Service	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Incarceration	0		0			0.0%
Probation	211		366			73.5%
Total Costs						**73.5%**

*Positive values represent an increase in costs incurred during the NAVNET period.
ŧ Costs have been removed.

Rick's utilization of emergency accommodations decreased from 52 days in the 1-year prior to NAVNET to 13 days during NAVNET (see Figure 15 and Table 19). This resulted in a 73.5% decrease in costs. Rick spent 177 more days in private landlord accommodations during NAVNET, resulting in an increase in costs of 417.5%. Rick moved on two occasions during his involvement in NAVNET (see Table 20).

Figure 15. Rick: Housing accommodations

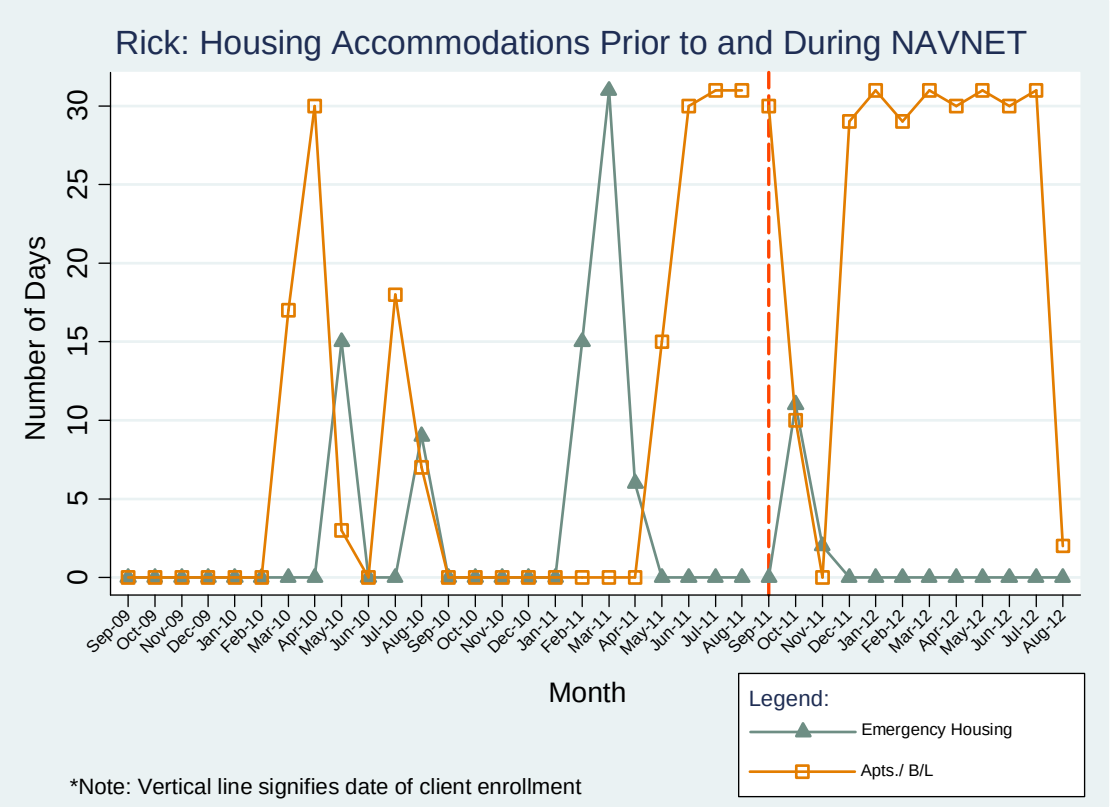


Table 19. Rick: Accommodation utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Accommodation	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total Emergency Housing	52		13			-73.5%
Total Apartment	107		284			417.5%
Total Costs		**$11,136.33**		**$19,588.48**	**$8,452.15**	**75.9%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

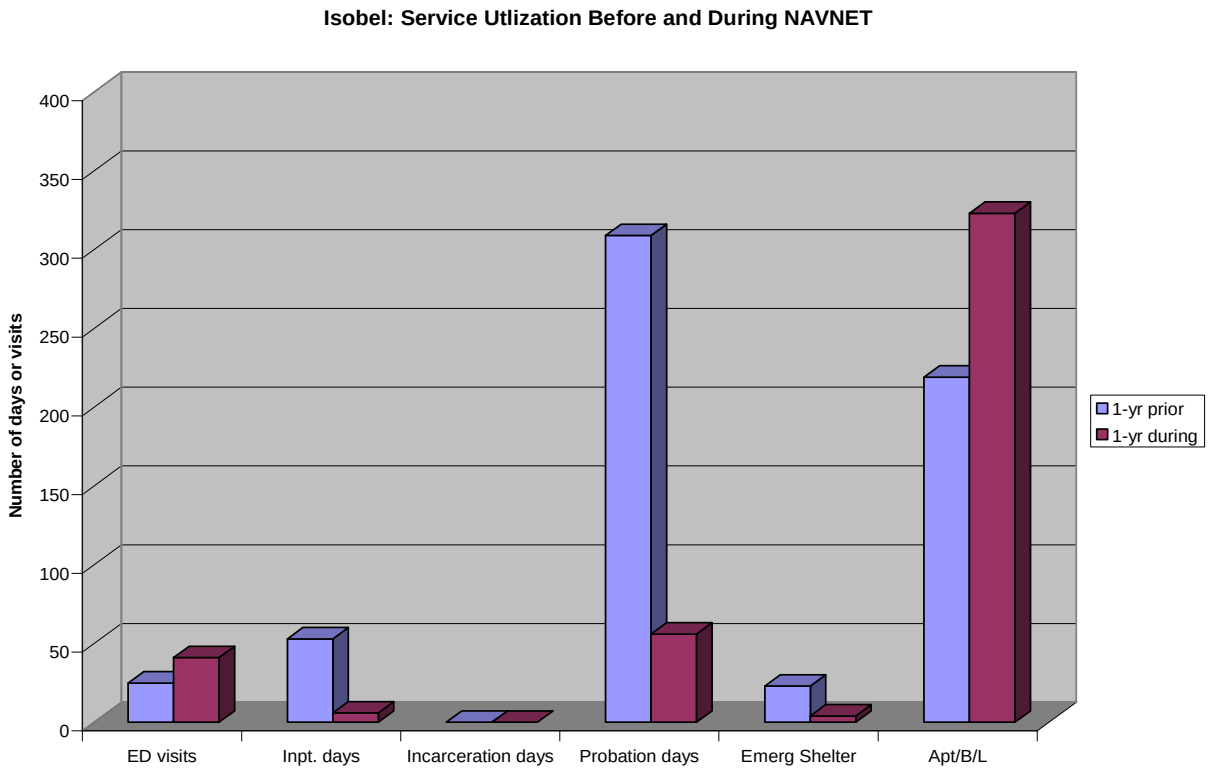
Table 20. Rick: Number of housing relocations

	1-year before	1-year during
Number of relocations	2	2

Isobel

Figure 16 illustrates Isobel's healthcare, justice, and housing service utilization 1-year prior to and during NAVNET.

Figure 16. Isobel: Service utilization before and during NAVNET



Isobel's ED visits increased from 25 in the 1-year prior to NAVNET to 51 during NAVNET (see Figure 17 and Table 21). This resulted in an 82.5% increase in costs. Isobel had 47 fewer inpatient days during NAVNET, resulting in an 86.6 % decrease in costs. During Isobel's involvement in NAVNET, her total healthcare costs decreased by 56.6% or $17,220.

Figure 17. Isobel: Healthcare service utilization

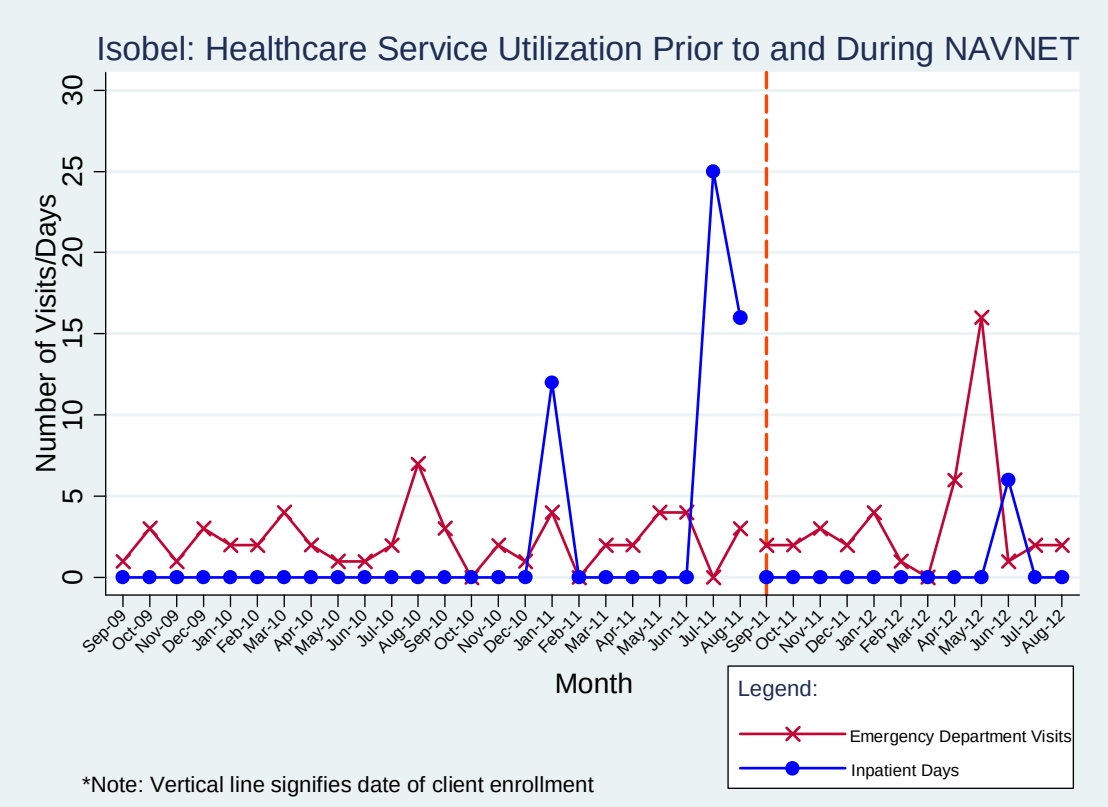


Table 21. Isobel: Health care service utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Location	Visits / Inpatient Days	Total Cost ŧ	Visits / Inpatient Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total ED Visits	25		41			82.5%
Total Inpatient Days	53		6			-86.6%
Total Mobile Crisis Response Team	1		0			-100.0%
		$30,993.41		**$13,772.94**	**-$17,220.47**	**-55.6%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

Isobel's probationary period began prior to her enrollment in NAVNET and ended soon after her involvement in NAVNET (see Figure 18 and Table 22). Therefore, there was a 81.9% decrease in costs associated with her probation. Isobel spent no time incarcerated in the 1-year prior to and during NAVNET.

Figure 18. Isobel: Involvement with the criminal justice system

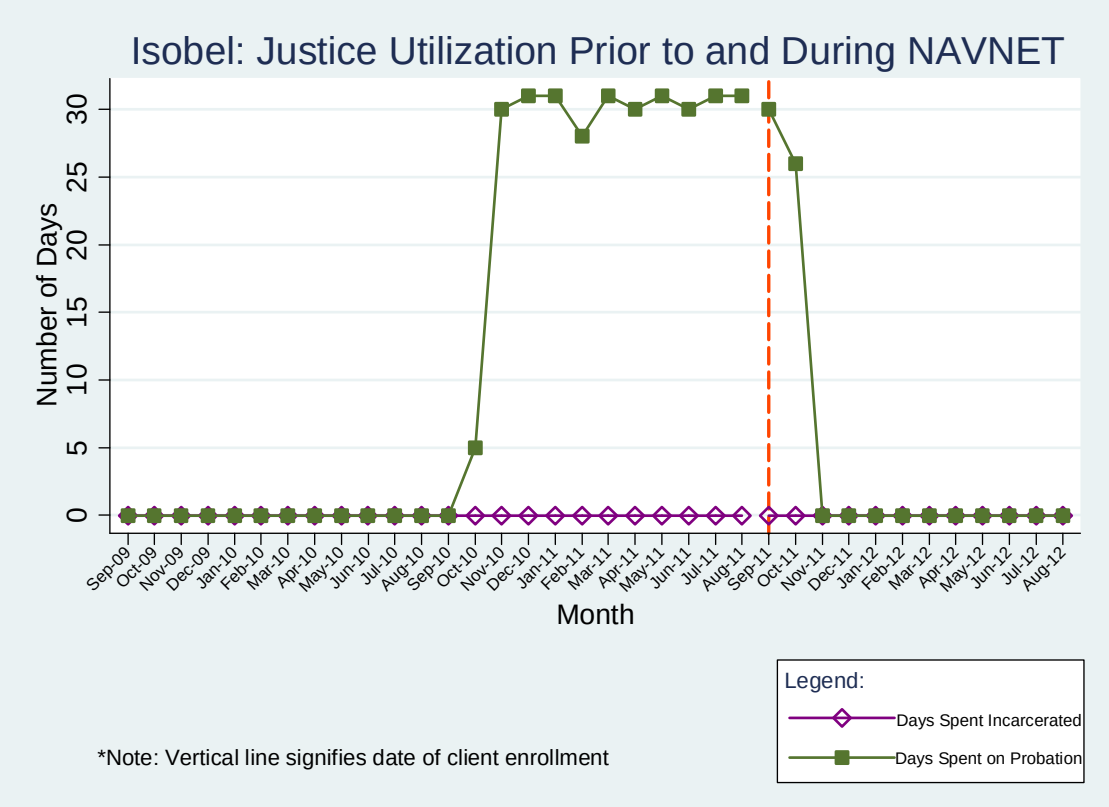


Table 22. Isobel: Justice system utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Service	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Incarceration	0		0			0.0%
Probation	309		56			-81.9%
Total Costs						**-81.9%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

Isobel had an unstable housing history prior to her enrollment in NAVNET (see Figure 19 and Table 23). Isobel's emergency housing usage decreased by 19 days during NAVNET, resulting in a decrease in costs of 80.2%. During her enrollment in NAVNET, Isobel spent more time in private landlord accommodations, resulting in a 368.3% increase in costs. Isobel experienced fewer moves during her involvement in NAVNET, from 13 in the 1-year prior to NAVNET to two during NAVNET (See Table 24). Overall, Isobel's housing costs increased by 158.9% or $10,844 during NAVNET.

Figure 19. Isobel: Housing accommodations

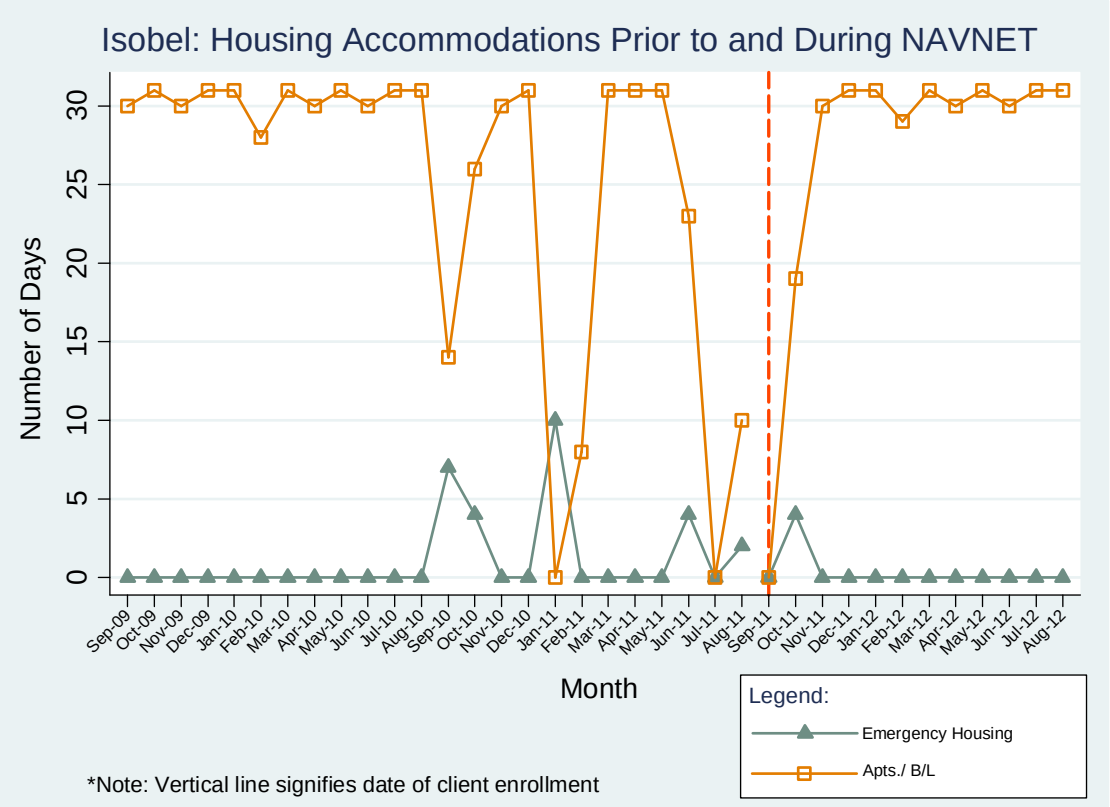


Table 23. Isobel: Accommodation utilization and direct costs 1-year prior to and 1-year during NAVNET

	1 Year Before		1 Year During			
Accommodation	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total Emergency Housing	23		4			-80.2%
Total Apartment	219		323			368.3%
Total Costs		**$6,826.66**		**$17,671.45**	**$10,844.79**	**158.9%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

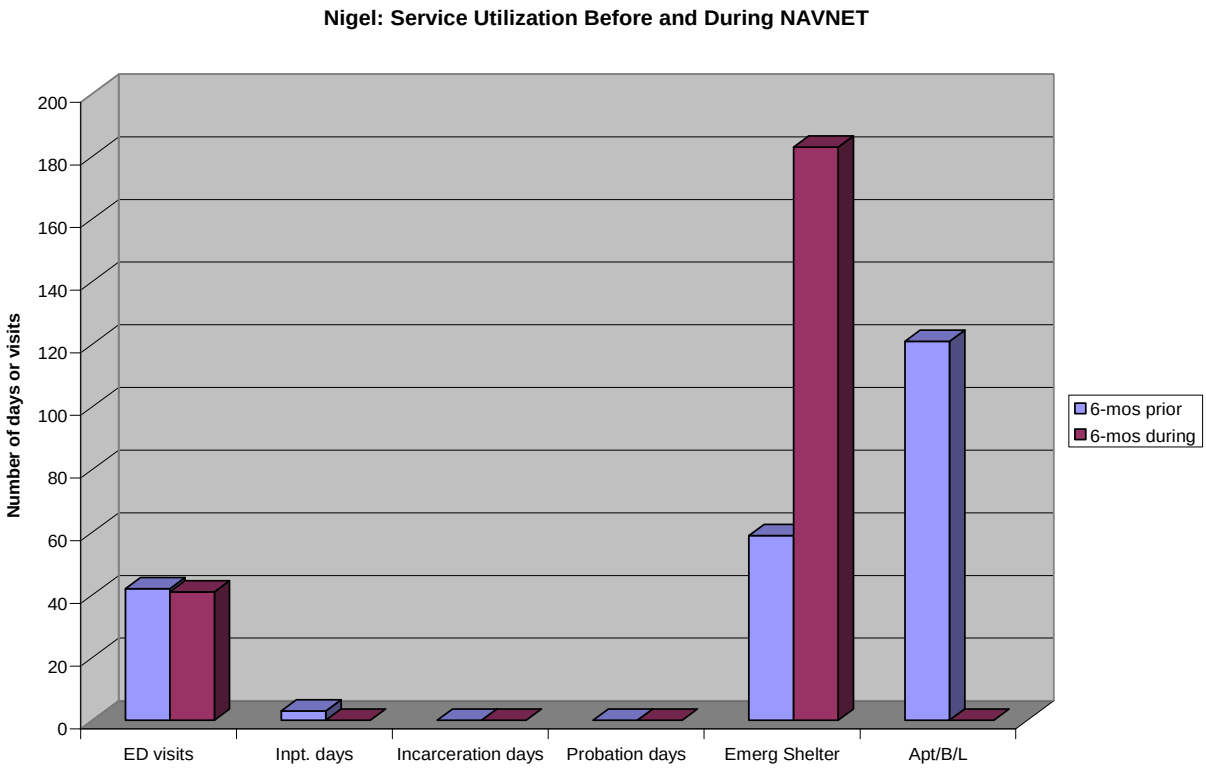
Table 24. Isobel: Number of housing relocations

	1-year before	1-year during
Number of relocations	13	2

Nigel

Figure 20 illustrates Nigel's healthcare, justice, and housing service utilization 6-months prior to and during NAVNET.

Figure 20. Nigel: Service utilization before and during NAVNET



Nigel experienced little change in his ED presentations and inpatient days during his initial 6-month involvement with NAVNET as compared to the 6-months prior (see Figure 21 and Table 23). Due to one fewer ED visit and three fewer inpatient days, Nigel's overall healthcare utilization costs decreased by 29.1% during his 6-month involvement with NAVNET.

Figure 21. Nigel: Healthcare service utilization

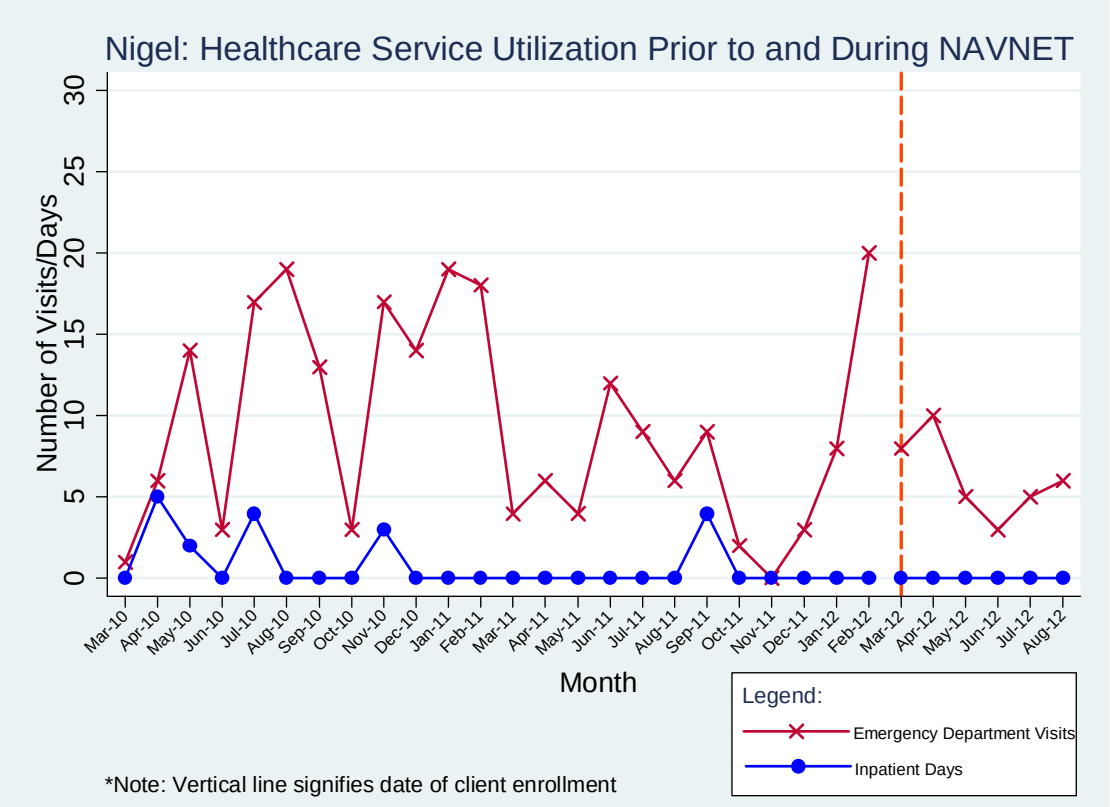


Table 25. Nigel: Healthcare service utilization and direct costs 6-months prior to and 6-months during NAVNET

	6 Months Prior		6 Month During			
Location	Visits / Inpatient Days	Total Cost ŧ	Visits / Inpatient Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total ED Visits	42		41			-18.1%
Total Inpatient Days	3		0			-100.0%
		$12,230.06				**-29.1%**

* Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

Nigel experienced an increase of 124 days in emergency housing during the 6-month NAVNET period, resulting in a 210.2% increase in costs (see Figure 22 and Table 26). The MPT members have determined that the emergency housing provided Nigel with the necessary stability and support. Thus, although it is still classified as "emergency" accommodation, it was considered longer-term housing arrangement. Nigel's private landlord accommodation decreased by 121 days during NAVNET, with a subsequent decrease in costs of 100%. Total accommodation

costs increased by 62.3% during the 6-month NAVNET period. Nigel had two housing relocations during his involvement with NAVNET (see Table 27).

Figure 22. Nigel: Housing accommodations

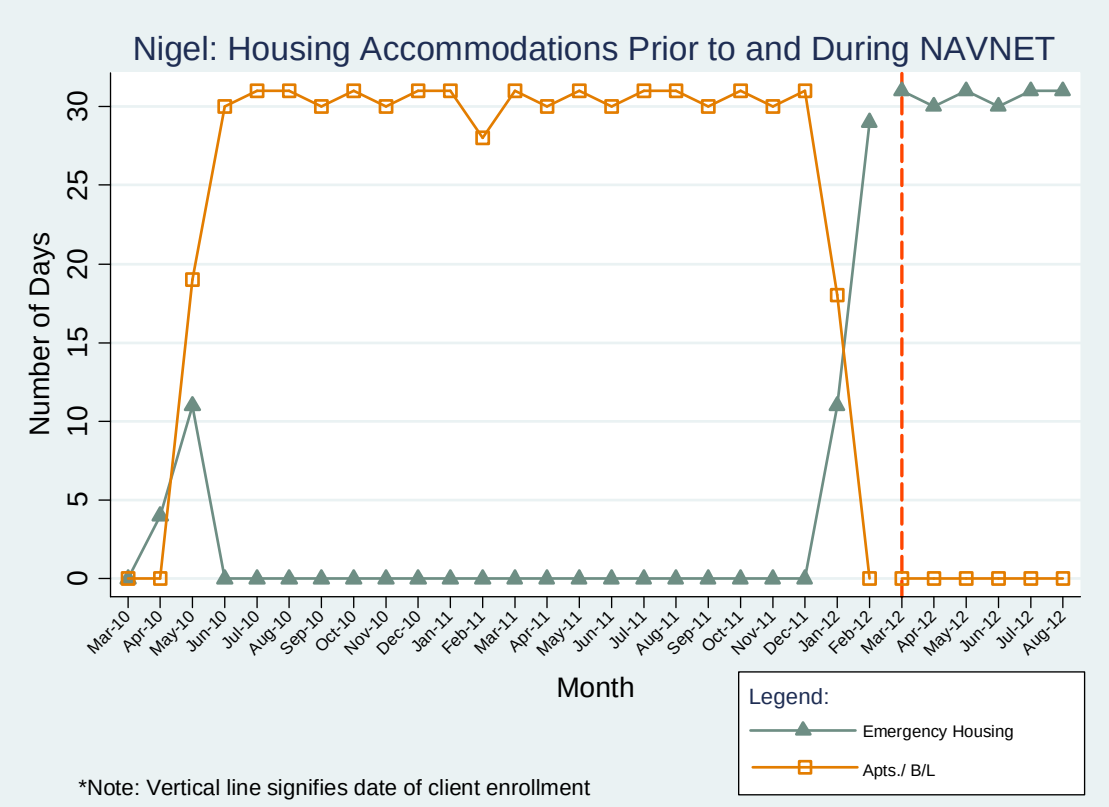


Table 26. Nigel: Accommodation utilization and direct costs 6-months prior to and 6-months during NAVNET

	6 Months Before		6 Months During			
Accommodation	Days	Total Cost ŧ	Days	Total Cost ŧ	Change in Cost ŧ	Percent Change*
Total Emergency Housing	59		183		$18,600.00	210.2%
Total Apartment	121		0			-100.0%
Total Costs		**$16,917.07**				**62.3%**

*Positive values represent an increase in costs incurred during the NAVNET period. Negative values represent a decrease in costs incurred during the NAVNET period.
ŧ Costs have been removed

Table 27. Nigel: Number of housing relocations

Nigel	6-months prior	6-months during
Number of relocations	4	2

3.3.3 Summary of Utilization and Cost of Services

- One of the clients' utilization and cost data were excluded from the analysis as he received a significant jail sentence approximately three months after he was enrolled in NAVNET.
- There was a wide range of healthcare service utilization among the remaining five clients.
- Total costs show a decrease in utilization and costs associated with inpatient days and the MCR team, although the utilization of the MCR team was low prior to and during NAVNET.
- Total emergency department utilization and costs increased slightly during the clients' enrollment in NAVNET.
- None of the clients who remained enrolled in NAVNET spent time in custody during either the baseline or NAVNET period.
- Total costs associated with probation decreased during the clients' enrollment in NAVNET. It is important to note that the clients' probationary periods began prior to their enrollment in NAVNET and, in some cases, continued after enrollment.
- Total costs associated with emergency housing decreased slightly from baseline to the NAVNET period.
- Total costs associated with apartment and board and lodging accommodations increased after the clients were enrolled in NAVNET. This is due to both an increase in the number of days clients' spent in apartments and board and lodging accommodations and increases in the cost of rent.
- The shortage of housing and the resulting reliance on emergency housing together with the increasing cost of rental properties resulted in increases in housing costs for these clients. This pattern will likely persist and may be generalizable to future NAVNET clients.
- One client experienced a significant reduction in the number of housing moves from 13 during the 1-year period prior to NAVNET to two during NAVNET.

3.4 Multisystem Planning Team Member Interviews

3.4.1 Method

All of the eligible MPT members (frontline staff) were interviewed (N=21). MPT members were deemed eligible to participate in an interview when their involvement with NAVNET exceeded a minimum of three months. For consistency within the evaluation methodology, the research team conducted MPT interviews between month-3 (T_1) and month-6 (T_2) of their client's enrollment. The majority of these interviews were conducted at approximately three months into each MPT member's involvement.

Participants were informed that their responses were confidential and that no individual identifying information would be used in the reporting of the results

Interviews were conducted to examine perceived levels of workload; efficiency and effectiveness of the NAVNET initiative; coordination/communication among organizations; changes in everyday work with clients, peer support, potential barriers; and suggestions for improvement.

Similarly, the NAVNET Coordinator participated in two interviews at approximately three months and one year after the first client enrollment. The questions focused on NAVNET's service delivery, MPT and NAVNET Member team functioning and collaboration, program capacity, meeting administration, client assessments, benefits and barriers to clients, and challenges.

3.4.2 Results

The interview transcripts were reviewed by two research staff. A content analysis was performed and themes were identified. There was high agreement between the two reviewers with respect to the most prevalent themes. The information obtained through the MPT interviews is summarized below. A full presentation of the themes can be seen in the Final Report.

3.4.3 Summary of MPT Member Interviews

- All of the eligible MPT members were interviewed at approximately 3 months post client enrollment (N=21). Two individuals from the research team reviewed the interview transcripts and identified themes.
- All of the MPT members felt that the MOU increased information sharing, and many felt that this enabled the teams to provide better client care.
- The majority of MPT members felt that NAVNET led to greater collaboration among service providers and improved problem solving. Some felt that the level of collaboration was limited by the mandates/policies of the MPTs' respective organizations.

- Most MPT members felt engagement/buy-in from other team members was good. However, some noted that several MPT members were struggling with the NAVNET philosophy and that varying levels of engagement, particularly among the case managers, affected the quality of the meetings.
- The majority reported positively on the Matrix Assessment tool and felt that it allowed for greater and more focused discussions and the prioritization of client goals. In contrast, a few MPT members felt that the matrix categories were too rigid and/or ambiguous.
- The majority felt that the time commitment associated with participating in NAVNET meetings was high, and they noted that they would not be able to have many NAVNET clients on their caseload for this reason.
- Some MPT members expressed disappointment that their expectations of NAVNET had not been met.
- Several MPT members felt that NAVNET responded inadequately to client crises.
- Several MPT members noted that it was too early to determine the impact of NAVNET on clients. However, four areas of improvement were identified: the speed with which things got done, the increased funding for clients, the increased collaboration and follow-through, and the "policy bending" or flexible application of policies for NAVNET clients.

3.5 Multisystem Planning Team Member Questionnaires

3.5.1 Method

The MPT Questionnaire contained questions designed to measure levels of collaboration and communication among NAVNET member organizations, frequency of client referrals, frequency of relevant information sharing, and perceived importance of information sharing. The questionnaire was adapted by the researchers from the Network Study Questionnaire developed by Northrup (2006)[6], with permission from the author. Open-ended questions were also added to the questionnaires.

The questionnaires were distributed to MPT members at the time of their initial involvement with NAVNET (baseline or T_0), 3-months following their first MPT meeting (T_1), and 1-year following the first client's enrollment (T_4). Each version of the questionnaire also included a

[6] Northrup, D. (2006), Evaluating Service System Coordination from the Providers' Perspective, in William H. Fisher (ed.) *Research on Community-Based Mental Health Services for Children and Adolescents (Research in Community and Mental Health, Volume 14)*, Emerald Group Publishing Limited, pp.95-116.

number of open-ended items to assess the MPT members' perceptions of the NAVNET initiative and its impact on clients.

3.5.2 Results

In an effort to minimize the content of the Summary Report, the results from the MPT member questionnaires at T_0 and T_1 were excluded. A complete presentation of the questionnaire data can be found in the Final Report.

In the follow-up questionnaire sent to MPT members at 3 months post client enrollment, respondents were invited to comment on areas of NAVNET they felt were working well and not working well, and any benefits they had seen for their clients. These responses closely mirrored those made by MPT members during the interviews, which were conducted around the same time, suggesting that the anonymity of the survey did not result in a more open and honest sharing of information or opinions.

The final MPT questionnaires, distributed at 12-months post enrollment (T_4), contained several additional open-ended questions to which 19 MPT members provided responses. The results from these open ended questions are summarized below.

Open-Ended MPT Member Survey Responses – 12 Months

- MPT members expressed mixed opinions regarding the impact of NAVNET on clients. Several respondents noted an increase in the clients' housing stability. Some noted an increase in information sharing and collaboration, without citing a specific client benefit. A few respondents felt that there had been no benefit to their client(s), noting the negative impact of low client engagement, poor team functioning, and increased bureaucracy.
- Many respondents noted a positive impact of NAVNET on them individually including: thinking outside of the box, working with new people, learning about other organizations, increasing their understanding of these clients and their needs, and a reduction in stress/isolation associated with working with these clients.
- Many MPT members felt that, although the NAVNET model was a good one, a lack of resources hampered their ability to provide service. Several respondents expressed frustration with the lack of client progress and the repetitious nature of the meeting discussions.
- A few respondents felt that NAVNET was not working. Reasons for this included: members adhering to different mandates, organizations being protective over their own budgets, and not having the right level of decision makers at the table.

- None of the respondents cited a clear, positive organizational impact with the exception of one respondent noting a reduction in "red tape."
- Two prominent suggestions for how NAVNET could be improved emerged: 1) increases in available funding and 2) suitable client housing that provides a level of support specific to the clients' needs.
- Of the 19 respondents who completed the final questionnaire, 13 indicated that they would like to see NAVNET continue.

3.6 NAVNET Member Interviews

3.6.1 Method

Thirteen of the 14 NAVNET Steering Committee members, including Regional Directors, Executive Directors and Managers of community and government organizations, participated in an interview. The majority of these interviews were conducted from September to November 2011, within one to three months of the first NAVNET client's enrollment.

The interview items investigated the impact of NAVNET on the Members' knowledge of other services, sharing of resources and information, policy development, funding arrangements, and ability to problem solve and coordinate services. Participants were also asked to identify potential barriers and were invited to provide suggestions for improvement.

3.6.2 Results

Thirteen of the 14 NAVNET Members, including Regional Directors, Executive Directors and Managers of Community and Government organizations, and the NAVNET coordinator were interviewed. The majority of these interviews were conducted from September to November 2011, within one to three months of the first NAVNET client enrollment. Two research staff conducted the interviews with one typing the participants' responses. The NAVNET Members were informed that their responses were confidential and that no identifying information would be used in the reporting of the results. An offer was extended to all participants to review the typed transcript of their interview and to provide additional comments.

The interview transcripts were reviewed by two research staff, one of whom had no involvement in the NAVNET evaluation and thus, no familiarity with the NAVNET initiative. A content analysis was performed and themes were identified. There was high agreement between the two reviewers with respect to the most prevalent themes. A full description of the themes can be found in the Final Report.

3.6.3 Summary of NAVNET Member Interviews

- 13 of 14 NAVNET Members were interviewed approximately 3 months following client enrollment. Two individuals from the research team reviewed the transcripts and identified themes.
- NAVNET Members expressed a high level of commitment to NAVNET and consistency in membership was maintained.
- The Members felt the MOU was sufficient for the sharing of personal client information.
- Several NAVNET Members noted the importance of developing a shared funding arrangement.
- The neutrality or independence of the coordinator was identified as key to the success of the MPT meetings.
- NAVNET impacted the Members' openness to work differently and increased their ability and willingness to share information. The free exchange of information was identified as one of the initiative's greatest strengths.
- Involvement in NAVNET led to a greater understanding of other programs and services and the barriers they encounter in providing service.
- Many of the NAVNET Members noted that the development of relationships with individuals from other departments/organizations increased opportunities for networking and problem solving.
- Several of the NAVNET Members cited concerns that there were misconceptions and high expectations regarding NAVNET, particularly among frontline staff.
- Several Members noted that the responsibilities associated with the development and coordination of NAVNET, and the facilitation of meetings, was too much for one person. Extending the number of clients and examining potential policy changes was hindered by a lack of staffing resources.
- Many of the interviewees noted that it was too early (approx. three months post client enrollment) in the process to see an impact on policies and clients.

4.0 Summary and Conclusion

All of the NAVNET Steering Committee members interviewed expressed a high level of commitment to the project and felt that the NAVNET service model was appropriate and evidence-based. They noted the benefits of learning more about other organizations' policies and procedures and increased information sharing, collaboration, and creative problem-solving. Similarly, the vast majority of MPT members expressed satisfaction with the increase in information sharing and collaboration. All of the NAVNET Members felt that the MOU was sufficient for the sharing of information. Several NAVNET Members and MPT members noted that staffing levels for NAVNET [one coordinator] would hamper its expansion and ability to inform policy changes.

After three months of involvement in NAVNET, many of the MPT members noted the high demands of the initiative on their time. This seemed especially true for the case managers who were assigned the greatest number of tasks and the responsibility of providing the team members with a client update. However, after 12 months, when asked how the program impacted them individually, only a handful noted the high time commitment. It is possible that, after time, the MPT members began to regard the NAVNET meetings, not as an additional burden, but as a regular part of their work routine. However, it is advised that NAVNET consider the time commitment associated with participation in the meetings and the number of NAVNET clients the MPT members can reasonably have on their caseloads.

Many of the MPT members expressed satisfaction with the Assessment Matrix. Several noted the benefit of the tool in generating discussion, keeping the MPT members focused, and prioritizing client goals. Others felt that the Assessment Matrix was too "cookie cutter" and that it was difficult to place the clients on the scale. In addition, some MPT members expressed dissatisfaction with the ambiguity of the categories.

There was a wide range of responses from MPT members with regard to the impact of NAVNET on clients. For example, one MPT member felt that NAVNET was a "waste of time" and another felt it led to "amazing benefits for clients." These varying opinions did not seem entirely dependent on the client and his/her outcomes, but on the organization/program for whom the MPT member worked. Several of the MPT members who expressed dissatisfaction with NAVNET noted that the program had not met their expectations. For example, some MPT members felt that NAVNET should not be case managing clients. Others felt that NAVNET lacked a plan for crisis response.

The majority of MPT members felt that the NAVNET model and guiding principles were good, but in practice, the application of these principles was limited by available resources and the organizations' mandates. For example, several MPT members felt that, without the appropriate resources, their "hands were tied" when it came to providing service to the clients. Emerging at 12-months post enrollment, but not at 3-months, was an expression of frustration among some MPT members with the repetitive nature of the MPT meeting discussions. Several MPT members noted that the meetings consisted of talking about the same things without "moving the clients forward." This lack of process was attributed to resource scarcity and unwillingness on the part of the organizations to make changes or "think outside the box." Several MPT members

felt that the meetings should consist of decision makers, and that they were being asked to do things that were outside their organizations' mandates.

NAVNET has allowed for some flexibility in the application of policies. For example, funding received for several clients was over and above regular allotments. However, no formal changes in policy have occurred, and resources remain limited, particularly in the availability of suitable housing. This may have impacted the MPT members' service provision and has led to feelings of frustration among some MPT members. Several MPT members felt that NAVNET would benefit from a shared funding arrangement and increased availability of suitable housing options for clients.

The evaluation has shown that NAVNET benefitted some of the clients, particularly in the area of housing. Several clients moved to more suitable accommodations while others maintained their housing for relatively long periods of time. It is unlikely that this would have occurred without the coordinated activities of the MPT members and the additional funding provided by the NAVNET member organizations, most notably AES and EH.

NAVNET also ensured that professionals and organizations, who otherwise might have terminated their involvement with several of these clients, maintained their involvement. For some clients, this led to increased client engagement and the development of positive relationships with their service providers. The importance of this cannot be overstated, as it likely allowed for progress in several areas of the clients' lives including improvements in behaviour and self-care and increased involvement in community/hospital-based activities. However, due in large part to the nature of the clients, progress has been slow but not insignificant. In addition, the 1-year time period may not allow for the potential impact of NAVNET on clients to be fully realized. It is important to consider the client population when determining benchmarks for success and to continue to measure progress and evaluate processes in order to maximize the benefit for both service providers and the clients they serve.

5.0 Limitations of the Evaluation

The evaluation was originally designed to occur over a 6-month period. Thus, data collection began soon after the first clients were enrolled in NAVNET, at a time when many of the participants were familiarizing themselves with the NAVNET process. For example, several MPT members stated that it was "too early" in the process to comment on certain aspects of NAVNET, most notably, its impact on clients.

The cost analysis was not an original component of the evaluation plan. Thus, it is limited in its scope and the conclusions that can be drawn. For example, it does not account for the costs associated with the provision of client-related services by the MPT members prior to and during NAVNET. In addition, the small sample size in conjunction with wide variability in clients' service utilization patterns, does not allow for the presentation of average client costs that could then be generalized to the broader population.

The NAVNET demonstration consisted of a small sample of individuals who were hand-selected for the project. Thus, the sample may not be representative of the population of individuals with multiple and complex needs. In fact, there is some anecdotal evidence that the NAVNET clients are some of the most challenging individuals in the system. It is important to note that the NAVNET clients are a small, heterogeneous group, so generalizations from the data regarding client outcomes should not be drawn.

6.0 Recommendations

1. It is recommended that NAVNET continue and, in an effort to provide equitable service and to avoid a lengthy waitlist and wait-times, expand its client capacity.

2. It is recommended that additional meeting facilitator(s), who are adept at navigating team dynamics, be hired for the NAVNET initiative. This will allow the NAVNET coordinator adequate time to 1) focus on bridging the gap between front-line service providers and NAVNET Steering Committee members, 2) make changes to the NAVNET service model, as necessary, and 3) advocate for policy changes. The addition of a part-time administrative position will also benefit the program.

3. It is recommended that NAVNET member organizations, in an effort to provide seamless and timely service, develop a coordinated funding system. The funds would then be administered at the discretion of NAVNET, with the expectation that the program be accountable to the NAVNET member organizations that contribute funds.

4. It is recommended that the NAVNET Steering Committee include a representative from the Department of Health and Community Services.

5. It is recommended that NAVNET review its partnerships with key stakeholder organizations in an effort to renew their commitment. The NAVNET member organizations' commitment to NAVNET must be communicated clearly to the managers and front-line service providers.

6. It is recommended that NAVNET member organizations focus on policy changes so that the work of the front-line providers is supported and consistent with the NAVNET philosophy.

7. It is recommended that changes in policy be clearly communicated to managers and front-line service providers. Although flexibility in the application of existing policies may benefit the clients, this policy-bending approach runs the risk of creating confusion and frustration among service providers and managers.

8. It is recommended that NAVNET Steering Committee members advocate for a sustainable solution to the shortage of affordable housing and promote the development of more appropriate, potentially less costly, community-based accommodation options for individuals with multiple and complex needs. Adequate housing is critical to the success of these clients; the gains made by NAVNET will not be maintained in the absence of suitable, long-term housing.

9. It is recommended that NAVNET develop a waitlist strategy with particular attention paid to the implications of a waitlist on waitlisted clients and service providers.

10. It is recommended that MPT membership be reviewed regularly, so that front-line providers who are unable to contribute to the process are removed from the team. Others, who may contribute to the process but for whom attendance at biweekly meetings is unnecessary, should be placed on a consultative status. An effort should be made to include psychiatrists in a consultative role.

11. It is recommended that the frequency of MPT meetings be reviewed case-by-case and on an ongoing basis. While it may be necessary to meet frequently, especially during the identification of client goals and the development of a client support plan, the continuation of biweekly meetings over the long-term may not be necessary.

12. It is recommended that an exit strategy for clients be developed. This strategy should incorporate a maintenance plan in an effort to prevent clients from returning to their pre-NAVNET levels of functioning. It must also be noted that some clients will not respond to the service provided by NAVNET, despite the teams' best efforts. Because progress with this client population may be slow moving, it will often be necessary to remain involved for significant periods of time. However, NAVNET should also recognize when a client has made the choice to remain disengaged and uncooperative. In these cases, the level of service provision may need to be modified or the client's continued involvement in NAVNET may need to be revisited.

13. It is recommended that NAVNET examine client characteristics in an attempt to determine if some clients are more or less appropriate for the program. Future research could determine what client characteristics are associated with the greatest success. This information may be used to reassess the program's eligibility criteria.

14. It is recommended that, in addition to the continued use of the Assessment Matrix, NAVNET adopt the use of a standardized assessment tool, such as a quality of life instrument, to measure client progress. In addition, it is suggested that the NAVNET initiative include an assessment of clients' behaviours to determine if behaviours are impacted by the clients' involvement in the program.

15. It is recommended that NAVNET consider the possibility of inviting clients to attend one of the initial meetings so that the clients may have a better understanding of what NAVNET is, and the MPT members, who have not had the opportunity to meet the client, may have a chance to do so.

16. It is recommended that NAVNET continue to evaluate processes and client outcomes over the long-term and make changes, as necessary, in an effort to provide the most efficient and effective service to clients.

Appendix A: Assessment Matrix

Client Identifier:						Indicate Code
NAVNET ASSESSMENT MATRIX	**1**	**2**	**3**	**4**	**5**	
Survival Skills	Easily draws predators, vulnerable to exploitation; has been victimized regularly; prefers street to shelter; no insight regarding dangerous behavior (i.e. solicitation of sex/drugs)	Is a loner and lacks "street smarts'; possessions often stolen; may be 'befriended' by predators; lacks social protection; has marked difficulty understanding unsafe behaviours	Is frequently in dangerous situations; dependent on detrimental social network; communicates some fears about people or situations; reports being taken advantage of (i.e. someone gave money to someone for an errand and person never returned or short changed).	Has some survival skills; is occasionally taken advantage of (i.e. friends only present on paydays); need some assistance in recognizing unsafe behaviours and willing to talk about them.	Strong survival skills; capable of networking and self advocacy; knows where to go and how to get there; needs no prompting regarding safe behaviour.	
Basic Needs	Unable to access food on own; very poor hygiene/clothing (i.e. clothes very dirty; goes through garbage & eats rotten food); resistant to offers of help on things; no insight.	Doesn't wash regularly; uninterested in help, but will access services in emergent situations; low insight regarding needs	Occasional attention to hygiene; has some openness to discussing issues; generally poor hygiene, but able to meet needs with assistance (i.e. prompting)	Some trouble staying on top of basic needs, but usually can do for self (i.e. hygiene/ clothing are usually clean/good).	Generally able to use services to get food, clothing; takes care of hygiene, etc.	
Income	No income.	Inadequate income and/or spontaneous or inappropriate spending.	Can meet basic needs with subsidy; appropriate spending.	Can meet basic needs and manage debt without assistance.	Income is sufficient, well managed; has discretionary income and is able to save.	

Client Identifier:						Indicate Code
NAVNET ASSESSMENT MATRIX	**1**	**2**	**3**	**4**	**5**	
Housing	Homeless or threatened with eviction; residence is unsafe.	In temporary or substandard housing; housing unaffordable (over 30% of income).	In stable housing that is safe but not affordable.	Household is safe; adequate subsidized housing.	Household is safe, adequate; has maintained housing for 12 months.	
Food	No food or means to prepare it.	Uses Food Bank and food kitchens.	Can meet basic food needs, but requires occasional assistance.	Can meet basic food need without assistance.	Purchases any food desired.	
Life Skills	Unable to meet basic needs such as hygiene, food, activities of daily living and/or maintaining housing.	Can meet a few but not all needs of daily living without assistance.	Can meet most but not all daily living needs without assistance.	Able to meet all basic need of daily living without assistance.	Able to provide beyond basic needs of daily living for self and others over the past 12 months.	
Physical Health	Critical health issue; currently not being treated.	Moderate health issue; currently not being treated.	Poor health impacts day-to-day living.	General health is stable.	Health has been stable for past 12 months.	
Mental Health	No connection to services (but clearly needed); extreme symptoms that impair functioning (i.e. talking to self, distracted, severe delusions/ paranoia, fearful/phobic; extreme depressed/manic mood); no insight regarding mental illness	Tenuous service engagement; possibly not taking medication that are needed for MH; not interested in services due to mental illness/low insight.	Reports having MH issues, but does not talk about them or reports having service connection already in place; may be taking prescribed medications.	Reports feeling down about situation or circumstances.	No Mental Health Issues	

Client Identifier:						Indicate Code
NAVNET ASSESSMENT MATRIX	**1**	**2**	**3**	**4**	**5**	
Substance Abuse	Obvious deterioration in functioning (i.e. MH due to substance use, severe symptoms of both substance use and mental illness, low or no insight into substance use issues, clear cognitive damage due to substances, no engagement with substance use support services but clearly needed).	Substance use obviously impacting ability to gain/maintain functioning in many areas (i.e. clear difficulty following through with appointments, self care, interactions with others, basic needs); not interested in support for substance use issues, but this may be due to low insight or other reasons (i.e. mental illness).	Substance use affecting ability to follow through on basic needs; has some support available for substance use issues but may not be actively involved; some trouble making progress in goals(i.e. could be a binge user).	Sporadic use of substances not obviously affecting level of functioning; is aware of substance use; still able to meet basic needs most of the time	No substance use or strictly social having no negative impact on level of functioning.	
Social Behaviours	Responds in angry, profane, obscene or menacing verbal ways; may come across as intimidating and off-putting to providers; may provoke verbal and physical attacks from other individuals; has significantly impaired ability to deal with stress; has no apparent social network.	Often has difficultly engaging positively with others; withdrawn and isolated; has minimal insight regarding behaviour and consequences; has few social contacts; negative behaviour often interferes with others in surroundings; often yells, screams or talks to self.	Has predatory behaviours; is observed to be targeting vulnerable individuals to 'befriend'; uses intimidation to get needs met (i.e. threatening and menacing to staff/clients)	Has some difficultly coping with stress; sometimes has angry outbursts when in contact with staff/others; some non-cooperation problems at times.	Mostly 'gets along' in general; if staff need to approach person; s/he can tolerate input and respond with minimal problems; may need repeated approaches about the same issue, even though it seems s/he 'gets it'.	

Client Identifier:						Indicate Code
NAVNET ASSESSMENT MATRIX	**1**	**2**	**3**	**4**	**5**	
Communication	Significant difficultly communicating with others (i.e. non verbal, fragmented speech); draws attention to self (i.e. angry talk to self/others); refuses to talk to staff when approached; may leave to avoid talking to provider.	Physical impairment making communication very difficult (i.e. hearing impaired & unable to use ASL); unwilling/unable to communicate with staff (i.e. shy, poor or no eye contact); doesn't speak English at all.	Some disorganized thoughts; poor attention span; withdrawn but will interact with staff/service providers when approached; pressured speech; very limited English.	Has occasional trouble communicating needs; language barrier may be an issue; occasionally reacts inappropriately.	Has strong and organized abilities; no language barriers; able to communicate clearly with staff about needs.	
Legal	Current outstanding tickets or warrants.	Current charges/trial pending, noncompliance with probation/parole.	Fully compliant with probation/parole terms.	Has successfully completed probation/parole within past 12 months, no new charges filed.	No active criminal justice involvement in more than 12 months and/or no felony criminal history.	
Family Relations	Lack of necessary support from family or friends.	Family/friends may be supportive, but lack ability or resources to help; family members do not relate well with one another; potential for abuse or neglect.	Some support from friends/family; family members are learning to communicate and support.	Strong support from family or friends.	Has health expanding support network.	
Social Connectedness	Not applicable due to crisis situation; in 'survival' mode.	Socially isolated and poor social skills to become involved; not interested/lacks ability to become involved.	Lacks knowledge of ways to become involved.	Some community involvement (advisory group, support group), but has barriers such as transportation.	Actively involved in the community	
Transportation	No access to transportation, private or public.	Transportation is available but not used or affordable.	Transportation is available but some barriers are present.	Transportation is generally accessible to meet basic travel needs.	Transportation is readily available and affordable; car is adequately insured.	

Client Identifier:						Indicate Code
NAVNET ASSESSMENT MATRIX	**1**	**2**	**3**	**4**	**5**	
Adult Education	Literacy or language problems are serious barriers to employment.	Language or literacy barriers, but resources are available to assist.	Enrolled in literacy, language or education.	Needs additional education/training to improve employment situation.	Has completed education/training needed to become employable; no literacy problems.	
Employment	No employment.	Temporary, part time or seasonal; inadequate pay, no benefits.	Employed full time; inadequate pay; few or no benefits	Employed full time with adequate pay and few or no benefits.	Maintains permanent employment for 12 months with adequate pay and benefits.	

Assessment Matrix provided compliments of Buffalo House, Alberta and Downtown Emergency Services, Seattle, Washington