Redesign of Data Collection Processes and Tools

Prepared for
St Matthew’s House
In
April 2019
By
Amy Ajay
Jing Chong
Yunlong Liang
Vatsal Mehta
Aisha Tousif
# Table of Contents

- **Executive Summary**
  - Page 3

- **Introduction**
  - Page 4
    - Background
    - Research Questions

- **Methodology**
  - Page 5
    - Environmental Scan
    - Interviews
    - Document Analysis

- **Findings**
  - Page 7
    - Environmental Scan
    - Interviews

- **Recommendations**
  - Page 11

- **User Manual**
  - Page 14
    - Data Collection Process
    - Spreadsheets and Columns
    - Don’ts
    - Do’s

- **Limitations**
  - Page 18
    - Environmental Scan
    - Interviews
    - Document analysis
    - New Data Collection Tool

- **Conclusion**
  - Page 19

- **Bibliography**
  - Page 19

- **Appendix**
  - Page 20
    - Interview Guide
Executive Summary

St. Matthew’s House (SMH) is a non-profit agency serving vulnerable seniors within the Hamilton area. SMH staff members serve as case managers to address the unique and evolving needs of their clients. These needs include, but are not limited to: housing, food security, healthcare, legal, and transportation needs. SMH staff members have identified several shortcomings in the monthly spreadsheets they use to collect, summarize and assess data from their clients. This report aims to identify the key problems in the current data collection system, and develop a new data collection tool that better informs the SMH staff members of the clients’ needs and how staff hours are allocated.

We conducted an analysis of the current documents used by the SMH staff members in their data collection process. We then developed a comprehensive interview guide to collect information from the SMH staff members representing different programs. We performed a thematic analysis of the interview transcripts and identified two key concerns. First, the data collected are over-generalized and do not accurately reflect the nuanced needs of the clients. Second, the time SMH staff members allocated to the clients with specific needs was not collected. We also conducted an environmental scan to identify evidence-based solutions.

Using a task-based framework, we developed a new data collection tool in a Microsoft Excel spreadsheet to standardize the process. This tool was structured to include the static client intake information on one sheet, and the dynamic client interaction information on another sheet. Drop-down menus were implemented to facilitate the inclusion of more detailed information, and still maintain consistency across all entries. Summary sheets were created to auto-populate sums with the inclusion of additional entries within the other two sheets. The summary sheets function as quick and simple overviews of the relevant totals, which would allow the SMH staff members to make conclusions based on the clients’ needs and the distribution of the staff hours. Lastly, we developed a user manual to describe the best practices for the new data collection tool.

Future considerations should focus on addressing the limitations of our research. The SMH staff members could be interviewed again to obtain direct feedback on the new data collection tool. An iterative process could be established to refine this tool and make it more user-friendly and informative.
Introduction

Background

St. Matthew’s House (SMH) is a non-profit, multi service agency that serves older and vulnerable seniors who are aged 55 and older through different staff supports and programs. SMH has four seniors’ programs:

- **Home2Stay** offers support to seniors at risk of being evicted/homeless
- **Crisis Intervention** helps with getting seniors without housing housed within three months
- **Senior’s Centre** provides case management services
- **Social Isolation** connects seniors with services they might need

SMH currently collects basic data of clients served and services provided on their Excel spreadsheets referred to as “Stats”. SMH is interested in building a new data collection, analysis and documentation tool that will account for the complexity of client needs, client demographics, how staff time is spent and types of supports provided. This new tool will help SMH to prioritize and support clients more effectively, and more accurately illustrate the complexity and impact of the work being completed, which may help the organization attract more resources and funding.

Research Questions

The main research question for this project is: **How should data be collected to reflect the actual needs of SMH?** In addition to this research question, based on our consultation with SMH, we have developed the following sub-research questions:

- What is the best data collection process?
- What is the best data collection tool?
- What data needs to be collected?
Methodology

A multidisciplinary team of five research associates volunteering for McMaster’s Research Shop started this project in February 2019 and completed it in April 2019. The research team met regularly to develop the research plan, analyze and discuss findings, create the new data collection tool, write this report and develop the user manual. SMH was consulted before and during the course of the project to help design the research plan and collect data. The methods we used to conduct this research project include environmental scan, document analysis, and interviews.

Environmental Scan

A literature search was conducted to assess common practices of data collection being used in government and non-profit organizations providing assistance to socioeconomically disadvantaged populations. Source databases searched were: Medline, Embase, and CINAHL. The reference list of key articles were also searched. Our inclusion criteria were primary and secondary research articles, written in the English language, published in the last 3 years from 2016-2019. The search categories and terms are summarized in Table 1. The articles were first screened by title and abstract. The included articles were then reviewed in full text and themes were identified.

Table 1: Search Categories and Search Terms

<table>
<thead>
<tr>
<th>Search Category</th>
<th>Search Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeless Persons</td>
<td>● Homeless person*</td>
</tr>
<tr>
<td></td>
<td>● Homeless people</td>
</tr>
<tr>
<td></td>
<td>● Street person*</td>
</tr>
<tr>
<td></td>
<td>● Street people</td>
</tr>
<tr>
<td>Type of work</td>
<td>● Referral</td>
</tr>
<tr>
<td></td>
<td>● Evaluation</td>
</tr>
<tr>
<td></td>
<td>● Planning</td>
</tr>
<tr>
<td></td>
<td>● Case management</td>
</tr>
</tbody>
</table>
| Institutions                  | • Government agenc*  
|                              | • Non-government agenc*  
|                              | • Shelter*             |
| Data Related Tasks           | • Data collection     
|                              | • Data management      
|                              | • Database management system  
|                              | • Information storage and retrieval  
|                              | • Workload tracking    
|                              | • Social work documentation |

In addition to conducting a search in academic databases, a similar search was also conducted in Google using the search terms listed above.

**Interviews**

To prepare for the interviews, we developed an Interview Guide (see Appendix A) for SMH staff members to help identify data missing from the existing data collection tool. Data from these interviews allowed the team to incorporate critical data elements and make the new data collection tool more reflective of the diverse services and supports offered by SMH. Interview questions were divided into two categories: data collection process and data analysis. All questions were reviewed and approved by staff at the Research Shop and SMH prior to the interviews.

During the 30-minute interviews, we provided the interviewees with context on the project and the intended use of their responses. We recorded the interviews and followed the Interview Guide. We also asked relevant questions that stemmed from the responses offered. Additional notes were also taken. Our goal was to ensure that the interviewees were comfortable during these conversations, so that they could effectively explain their experience with data collection and analysis using the existing data tool.
We adopted an online post-interview team feedback system which allowed us to record challenges faced, effective strategies used during the interviews, and suggestions for future interviews to ensure that every successive interview was more effectively conducted. Upon completion of each interview, we updated this post-interview feedback document and transcribed the interview recording.

After all interviews were completed, we analysed the interview transcripts and notes and prepared two documents: Themes Emerging from Interviews and Client’s Needs. The Themes Emerging from Interviews document was focused on the administrative side of SMH, outlining key findings from the six interviews such as data being collected, data collection process, current workflow, and services. The Client’s Needs document compiled a list of all the client-related data that should be incorporated to ensure that the new data collection tool encompassed all the data required for the services offered at SMH. These documents were used to inform the development of the new data collection tool to optimize its potential to benefit SMH and its clients.

Document Analysis

We examined various documents provided to us by SMH. The referral form and intake form conveyed key demographic information collected from the clients. For example, clients’ age, sources of income, connections with family doctor, and Service Prioritization Decision Assistance Tool (SPDAT) scores were noted and accounted for in the design of the new data collection tool. The existing “Stats” Excel spreadsheets for each program provided further insights into the types of data collected. These documents were used to develop an understanding of the current data collection process, and inform our design of the Interview Guide and the new data collection tool. We also examined the requirements of the different funding agencies to help improve the current data collection tool.

Findings

Environmental Scan

This section presents the findings of an environmental scan aimed at identifying common practices used by government and non-profit organizations dedicated to assisting homeless populations. The scan located one website, one dissertation, one conference proceeding, and one online presentation slidedeck with relevant information. Key findings were summarized below.
1. **Proceedings from international conferences (Bullard, 2005)**

To address the knowledge gap in homelessness assessment, The Canadian National Homelessness Initiative has established its own data collection and case management platform known as Homeless Individuals and Families Information System (HIFIS). This system enables client intake, assessment, and referral without requiring clients to repeat their stories multiple times. It also empowers service providers with custom reports for homelessness trends and needs. Some of the features include built-in client prioritization and assessment with Vulnerability Assessment Tool (VAT) and SPDAT, collaboration with other service providers and provision of referrals based on real time homelessness data (e.g. housing inventory), tracking of services provided (e.g. counselling), as well as production of custom reports. HIFIS can be installed on a wide range of devices including laptops, tablets, smartphones, and allows integration of client consent with stringent confidentiality protection. HIFIS can be obtained free of charge.

2. **The Canadian Observatory on Homelessness**

The Canadian Observatory on Homelessness is a Canadian research institute dedicated to mobilizing research in the area of homelessness. It disseminates a wide range of high quality tools, frameworks, and reports through the Homeless Hub (its online digital library) to support policy makers, scholars, and professionals working on issues related to homelessness. A number of client assessment and triage tools available in this hub have been identified as validated and effective.

   I. **Vulnerability Assessment Tool (VAT)(Kooistra, 2016):** VAT is currently the best screening tool for clients who could benefit the most from intensive housing interventions. It assesses client vulnerabilities in ten domains:

   1. Survival Skills
   2. Basic Need
   3. Mortality Risk
   4. Medical Risk
   5. Organization
   6. Mental Health
   7. Substance Use
   8. Homelessness

rshop@mcmaster.ca researchshop.mcmaster.ca
9) Communication
10) Social Behaviors.

In addition to being a screening tool, it also supports program planning by providing information on service utilization and identifying gaps in the service system. It could also be shared with funders to support calls for more resources by identifying the range of vulnerabilities in the community. VAT has already been integrated into the Homeless Individuals and Families Information System (HIFIS). However, significant training and evaluation protocols are required prior to using this tool.

II. SPDAT (Service Prioritization Decision Assistance Tool, 2015): VI-SPDAT is a triage tool created for front line workers working with homeless clients to effectively triage clients based on acuity of need. It is best used in busy communities where staff don’t have the time to complete a full SPDAT assessment. Meanwhile, the full SPDAT is a comprehensive assessment tool that’s being used by more than one thousand communities across the U.S. and Canada. It can be highly informative for guiding case management. SPDAT has also been integrated into the Homeless Individuals and Families Information System (HIFIS). Similar to VAT, using SPDAT also requires formal training.

3. Literature on data management of homelessness (Smith, 2011)
The Homeless Management Information System (HMIS) is the U.S. counterpart of the Canadian HIFIS. HMIS can help facilitate coordinated service provision for homeless clients when local partner agencies establish data sharing protocols. When a client uses the service of one social service agency, a series of data elements can be collected in HMIS which can then be shared among partner agencies upon permission of the client for tracking and service coordination as they move through the continuum of care. In addition to case management, HMIS also offers opportunity for programmatic evaluation and program planning. For instance, in Philadelphia, The Office of Supportive Housing established new homelessness prevention programs aimed at helping those at high risk of violence in neighborhoods identified by combining past clients’ last known stable address with crime rate data from the local police department. Small administrative units consisting of a few staff members are usually set up to implement and maintain HMIS over a given geographical area, where one staff member is usually dedicated to liaising with partner agencies and providing the necessary training.
4. Social work documentation best practices (Boyne, 2019)

Literature suggests the following practices for social work documentation:

I. The purpose of social work documentation could be to demonstrate program accountability to the client, the program, and the funder. Case notes could consider recording significant encounters, interventions, outcomes, and crisis patterns. This information could potentially support case managers in planning, implementation, and evaluation of the service provided to the client.

II. The “S-O-A-P” format is a helpful way to record patient counters as it allows accurate, concise, timely, and standardized notes. This acronym refers to the following four sections of the case note:
   - S: Subjective information reported by the client
   - O: Objective information observed by the case manager
   - A: Case manager’s assessment of the situation
   - P: Case manager’s plan for assisting the client

III. Each potential encounter could potentially include the following data elements:
   - WHO: who provided the service including name, title, qualification
   - WHERE: physical location where the service was provided
   - WHAT: what specific service was provided
   - WHEN: time, date, and the duration for which the service was provided
   - WHY: the purpose for which it was provided
   - HOW: description of how it was done, needs to be descriptive, measurable, and include patient response and progress

Interviews

In this section, we draw on interviews to describe the basic steps in the current client interactions and data collection, and list identified problems with the current practices.

- Current Client Interaction and Data Collection Process
  1. A client is referred to SMH from other organizations or agencies (e.g. shelters) which complete a referral form in paper. Occasionally, clients can refer themselves.
  2. In most cases, the manager decides which program this client should be served by.
3. The staff member of that program interviews the client to assess their needs and fills out the intake form also in paper. On the intake form, the client’s basic demographic information, medical history, and housing status and history are recorded.

4. The staff member interacts with the client, as well as relevant third parties involved, through emails, phone calls, in home visits, and other in person visits. During the process of serving the client and meeting their needs, the staff member takes case notes in paper, on a computer, or on the whiteboard during or after the visit, in the office or at home. In case notes, the staff member writes down the client’s needs, what has been done to meet the needs, and what the outcomes are.

5. Staff typically follow up with a client for the next few months. After that, the client’s file may be closed if they are in stable condition.

6. Towards the end of each month, the staff members make a monthly summary statistic file or “Stats” in Excel spreadsheets by consulting the referral form, intake form, and case notes. Each program has its own monthly summary file. The common statistics include the total numbers of clients served, female clients, male clients, phone calls and visits made.

- Problems Identified with Current Practices

1. The current tools do not collect detailed measurements of the staff members’ workload. SMH needs such measurements to support the applications for more resources to resolve the gap between the demand and the staff time available. Such measurements are also useful in showing the patterns and trends in the clients’ needs. For example, it seems that an increasing number of clients require healthcare and financial services in recent years and there is a shortage of staff members to support those needs.

2. The current tools do not collect detailed information on the clients’ needs and services provided to them. For example, no information is collected on the reasons for the current housing status, how third parties are involved in supporting the clients’ needs, or what specifically the staff members do to serve the clients.

3. At the end of each month, the staff members have to spend hours sifting through loads of client documents to manually sum up the totals. This is a time-consuming activity considering that the staff members are already very busy with high caseloads. They would prefer a digital and more automatic tool to save the time of transferring data from paper to computer or from one computer file to another.
4. The staff members work in the field for most of the time of their typical work days. They don’t have a convenient tool to collect data on the go.

5. For the Home2Stay program, the current Excel spreadsheet was made per requirements from the City, thus has more sections than necessary. For example, sections on children and families are not quite applicable to the senior clients SMH serve.

Recommendations

Based on the findings discussed above, we offer the following recommendations to streamline the work process and better serve the clients:

1. Use the new data collection tool we created in Excel (see Figure 1) to more efficiently keep track of the clients’ data and the staff members’ workload.

2. Take some time to read the User Manual in the following section first to get familiar with how to use the new tool.

3. Make time to fill in as much information as possible.

4. Use the new Referral Form (Figure 2), where some open-ended questions in the old Referral Form have been replaced with multiple choice questions that the clients can check off.

5. Use electronic time tracker tools (e.g. Tick @ https://www.tickspot.com/) to efficiently track the staff members’ work time.
<table>
<thead>
<tr>
<th>Month:</th>
<th>April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year:</td>
<td>2019</td>
</tr>
<tr>
<td>Clients</td>
<td># of New Clients</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2</td>
</tr>
<tr>
<td>Clients</td>
<td># of Clients Served</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client's Need</th>
<th># of Clients</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Management Service</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Food Security (Meals)</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Food Security (Weekend Bags)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Health Support</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Healthcare Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Home Management</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Interaction</th>
<th>Times</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td>In Home Visit</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>In Person (Not Home)</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Phone Call</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>

**Figure 1: Screenshot of New Data Collection Tool**
SENIORS SUPPORT PROGRAM – REFERRAL FORM

Date of Referral: __________________________

Client Name: ______________________________ Date of Birth: __________________________

Client Address / Shelter Location: ______________________________

Main Phone: ______________________________ Other: ______________________________

Source of Income: ______________________________

Does client have a family doctor? Yes ☐ No ☐ Name/Number: ______________________________

Referring Agency/Community Partner:

Name: ______________________________ Agency: ______________________________

Phone: ______________________________ SPDAT Score: ______________________________

Is client aware of referral? Yes ☐ No ☐

Other Agencies/Professionals Involved:

☐ City ☐ Housing Service ☐ Police ☐ Specify if other:
☐ Cleaning Service ☐ Landlord ☐ Tax Service ☐
☐ Community Organization ☐ Legal Service ☐ HSR / DARTS ☐
☐ Hospital ☐ ODSP ☐ Tribunal ☐
☐ Housekeeping Service ☐ Physician ☐ Other ☐

Client’s Needs *one must be identified in order for referral to be accepted*

☐ Community Support ☐ Housing Service ☐ Safety Support ☐ Specify if other:
☐ Financial Management ☐ Language Support ☐ Social Program ☐
☐ Food Security ☐ Legal Service ☐ Tax Service ☐
☐ Health Support ☐ Literacy Support ☐ Transportation Service ☐
☐ Healthcare Service ☐ Mental Health Support ☐ Welfare Service ☐
☐ Home Management ☐ Mobility Support ☐ Other ☐
☐ Housekeeping Service ☐ Police Support ☐

History / Related Issues:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Referred to: ☐ H2S - _________ ☐ Crisis

Referral Received By: __________________________ Date Received: __________________________
User Manual

Data Collection Process

There are six spreadsheets in the new data collection tool:

- **Client Intake Info**
- **Client Interaction**
- **Monthly Summary_Short**
- **Monthly Summary_Long**
- **Annual Summary_Short**
- **Annual Summary_Long**

When there is a new client, use **Client Intake Info** to record their intake information. To record an interaction with the client, use **Client Interaction** and make sure to use their Client ID created in **Client Intake Info**. Information recorded in **Client Interaction** acts as case notes. Once data are entered in **Client Intake Info** and **Client Interaction**, summary information will automatically show in **Monthly Summary_Short**, **Monthly Summary_Long**, **Annual Summary_Short**, and **Annual Summary_Long** once the month and/or year are selected.

Use either the short and/or the long form of the summary sheets depending on the program’s needs.

Spreadsheets and Columns

**DDM = Drop Down Menu**

Many of the cells in **Client Intake Info** and **Client Interaction** have drop-down menus for users to select from. The items that have drop-down menus are followed by “DDM” in this manual. To select an item from a drop-down menu, click on the cell where data are to be entered, click the downward-facing arrow that appears to the right of the cell, then scroll down to select the wanted option.

**Client Intake Info**

1. **Client ID** - Enter a unique serial client number for a new client. Client ID is what connects **Client Intake Info** and **Client Interaction**.
2. **Intake date** - Enter only the month and day when the client was taken. There is no need to enter the year as the current year will automatically show. Examples of the date format include “Jan 3”, “1/3”, “3 Jan”.

rshop@mcmaster.ca    researchshop.mcmaster.ca
3. **Name** - Enter the client’s name.

4. **Age** - Choose the client’s age group. (DDM)

5. **Gender** - Choose the client’s gender. (DDM)

6. **Aboriginal, Newcomer, Racialized, Veteran Status, Francophone, Disability, Communication Barrier**
   - Choose “Yes” or “No” for each of the categories. (DDM)

7. **Referral Source** - Choose where the referral came from. (DDM)

8. **Housing Status** - Choose the client’s current housing status. (DDM)

9. **Main Reason** - Choose the main reason for the client’s current situation. (DDM)

10. **Housing Urgency** - Choose the level of urgency for housing. (DDM)

11. **Main Medical Conditions** - Choose the client’s main medical condition. (DDM)

12. **VI-SPDAT Rating** - Choose the client’s VI-SPDAT score. (DDM)

13. **Notes** - Fill this section for any information that was not covered in the above sections, or to specify any information that was marked as ‘Other’ in other columns.

---

**Client Interaction**

1. **Client ID** - Enter the unique client number or Client ID created in *Client Intake Info*.

2. **Date** - Enter only the month and day when the client was served. There is no need to enter the year as the current year will automatically show. Examples of the date format include “Jan 3”, “1/3”, “3 Jan”.

3. **Client’s Need** - Choose the nature of the service provided. (DDM)

4. **Type of Interaction: Email, In Home Visit, In Person (not home) Visit, Phone Call** - Enter the number of times the client was contacted/visited and approximate amount of time (in hours) that was spent serving the client. For example, 15 minutes is equal to .25 of an hour; 10 minutes is equal to .17 of an hour; 5 minutes is equal to .08 of an hour

5. **Housing Outcome** - Choose the housing outcome for the client. (DDM)

6. **Social/Economic Outcome** - Choose the social/economic outcome for the client. (DDM)

7. **Referred To** - Choose the organizations/agencies the client was referred to. (DDM)

8. **Future Action** - Choose whether follow-ups are needed. (DDM)

9. **Task** - Choose what the staff member did to serve the client. (DDM)

10. **Third Party** - Choose the other organizations/agencies involved in serving the client. (DDM)
11. **Notes** - Fill this section for any information that was not covered in the above sections, or to specify any information that was marked as ‘Other’ in other columns.

---

**Monthly Summary_Short & Annual Summary_Short**

1. **Month** and/or **Year** - In the upper left cells highlighted in yellow, “Month” can be selected using the drop-down menu and “Year” can be entered. The summary data for the chosen month and/or year will automatically be displayed (DDM).

2. **# of New Clients** - Shows the number of new clients (specifically males, females and other) in the selected month and year.

3. **# of Clients Served** - Shows the number of clients served (specifically males, females and other) in the selected month and year.

4. **Type of Interaction** - Displays the number of times each type of interaction (Email, In Home Visit, In Person (not home) Visit, Phone Call) was conducted and the amount of time (in hours) spent for each interaction in the selected month and year.

5. **Client’s Need** - Displays the number of clients served and the total time (in hours) spent for each of the Client’s Needs in the selected month and year.

---

**Monthly Summary_Long & Annual Summary_Long**

1. **Month** and/or **Year** - In the upper left cells highlighted in yellow, “Month” can be selected using the drop-down menu and “Year” can be entered. The summary data for the chosen month and/or year will automatically be displayed (DDM).

2. It summarizes the data of the clients served in the selected month and/or year for all the columns in **Client Intake Info** and **Client Interaction**, except for “Client ID”, “Intake Date”, “Name”, “Date” and “Notes”.

---

**Don’ts**

- **Don’t** delete any column. HIDE columns not needed by selecting and right clicking on the whole column and then selecting “hide” in the menu. Unhide the hidden columns by selecting and right clicking on the two columns on either side of the column you want to see and then selecting “unhide” in the menu.
• **Don’t** enter any data into the four summary sheets except for “Month” and/or “Year”. The summary data are generated automatically when the “Month” and/or “Year” are selected.

• **Don’t** generate multiple records for the same client in Client Intake Info. A client can only be documented once as a new client. Multiple entries for the same client are allowed in Client Interaction because a client can be served multiple times.

• **Don’t** leave “Client ID” and “Intake Date” blank in Client Intake Info, or “Client ID” and “Date” blank in Client Interaction.

Do’s

• Use the same “Client ID” for the same client consistently in Client Intake Info and Client Interaction. Otherwise, the summary data in the four summary sheets may not be accurate.

• To filter the information by a selected criterion, use the arrows next to the headings in Client Intake Info and Client Interaction. For example, to filter by month, go to the ‘Dates’ column heading, and click on the white arrow next to the heading. To select a specific month, deselect all, then choose your month of interest.

• To generate graphs or conduct other data analysis, copy and paste the data in the four summary sheets into a separate Excel file.

• If multiple staff members working for the same program enter data in separate files, compile data by copying and pasting the entire rows from one file to another to get the monthly summaries.

• Client Intake Info and Client Interaction were only set up properly until Row 50,000 to prevent the new tool from taking up too much computer storage space and slowing down the computer. After Row 50,000, consider creating a duplicate of the new tool and delete all the data to start fresh. Another way is to create a database system to manage the large amount of data.

• Be aware that due to privacy and confidentiality concerns, no column was created for the clients’ date of birth. As a result, in Monthly Summary_Long and Annual Summary_Long, the total number of clients served for each age category (16-64, 65-74, 75+) may not be accurate. It is because this total number is calculated based on the age category a client belonged to at intake. For each interaction with SMH afterwards, the client’s age may change, so may the age category.

• If items in the drop-down menu of a column are too long to be completely displayed, widen this column by hovering the cursor over the left/right edge of the heading cell and, when the cursor turns into a double arrow, dragging the cursor to left/right.
Must select BOTH a month and a year in Monthly Summary_Short and Monthly Summary_Long in order for the monthly summary data to be displayed

After entering the year in the four summary sheets, use the “enter” key on the keyboard or click away on any other cell for the summary data to be displayed

Limitations

Environmental Scan

There is currently very little scholarly research in the area of data collection and management for homeless shelters. As a result, it’s difficult to provide recommendations based on validated findings. As a result, much of the search was focused on grey literature, making it difficult to be comprehensive in our search, and the evidence reviewed may have limited reliability.

Interviews

There was a limited number of interviews that were conducted and as such, the research we conducted and the new data collection tool we developed were based on the information we gathered from a small number of consultations. As such, it would be preferable to have more interviews. Due to confidentiality, we did not have the opportunity to conduct client interviews. Therefore, the new data tool was not developed based on any assessments of the effectiveness of the current data tool in providing service and its impact on client experience.

Document analysis

The design of the current system of reporting may have been informed by the requirements posed by funders, one of which includes the Local Health Integration Network (LHIN) that oversees the Hamilton area. With recent changes in provincial governance, restructuring of municipal healthcare systems is set to be implemented. A significant proposal involves the centralization of separate LHINs into a single ‘super agency,’ which will likely have significant funding and administrative impacts that are currently unknown.
New Data Collection Tool

Electronic files have the risk of being deleted, altered or destroyed unintendedly. Therefore, it is a good practice to regularly back up the new data collection tool. The clients’ private information may be stolen or used by unauthorized individuals if the computers that store the new data collection tool are hacked or lost. Thus, it is suggested that SMH staff members protect both the computers and the files with passwords. In addition, due to the skill levels of the Research Shop project team members in Excel, there is a lack of more complex data analysis provided by the new data collection tool. There is also limited space for changes or modifications on the part of the SMH staff members.

Conclusion

This report explored tools and methods commonly used for data collection by government and non-profit organizations, assessed documents and forms used by SMH for recording data, and conducted an evaluation of SMH’s existing data collection tool. To do this, we conducted a literature review, consulted SMH documents, and facilitated interviews with SMH staff members. Using this information, we developed a new data collection tool that SMH can use to collect complex data more accurately, record the amount of time spent on each client interaction, and generate monthly summaries.

Future research on SMH’s data collection tools should the focused on determining the specific information that SMH would like to collect. This will allow for the development of a more refined data collection tool. The interviews conducted of SMH staff members were an effective method for gathering information about their daily activities and how the data collection tool was currently being used. This method could be replicated and improved by conducting more interviews with SMH staff members and their clients.
Bibliography


Appendix A

Interview Guide

Introduction

We are Research Associates from the Research Shop of McMaster University. We are here to collect information to help us improve the data collection tool that you currently use. We are going to ask you some questions about your daily work and opinions of the data collection tool. This interview will last about 30 minutes and will be recorded.

Context

1. Could you briefly describe the goals of your program (services offered and delivered)?
2. What does a typical day look like for you?

Data collection

1. What data is currently being collected and how?

<table>
<thead>
<tr>
<th>Tools/Software</th>
<th>Data Collected</th>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What are you looking for in a data collection tool? (e.g. important features)
3. What’s not working with how you collect data right now?
4. What information would be useful to collect that isn’t part of your data collection tool now?
   a. What kind of data do you find most difficult to keep track of?
   b. Is any data collected from clients after their initial visit (for example on their second, third, fourth etc. visits)?

Data analysis

1. How is the collected data currently used in the day-to-day functions?
   a. Client assessment
   b. Program planning
   c. Resource allocation
   d. Performance monitoring

rshop@mcmaster.ca       researchshop.mcmaster.ca
e. Funding application  
f. Other  

2. What, if anything, works well with how data gets used right now?  
3. What, if anything, doesn’t work well with how data gets used?