The Grey Bruce Multidisciplinary Eating Disorder Program
Keystone Child, Youth & Family Services

Evaluation Planning Grant
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Executive Summary

Keystone, Child, Youth & Family Services: The Grey Bruce Multidisciplinary Eating Disorder Program
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A capacity building project to develop and pilot an evaluation of The Grey Bruce Multidisciplinary Eating Disorder Program. The evaluation provides an overview of demographic and clinical characteristics of clients accessing the program, identifies relevant tools for evaluating treatment outcomes, and explores the effectiveness of community education and training.

The Purpose

- To build our evaluation capacity in order to use qualitative and quantitative data to measure program effectiveness in relation to the goals of our programs and the needs of children, youth and families in Grey Bruce.
- To guide adjustments in programming and treatment for eating disordered youth in Grey Bruce.
- To develop evaluation partnerships within the community.

The Program

Keystone, Child, Youth & Family Services is a voluntary, non-profit prevention and counselling agency that provides information, counselling and support to children, youth, and families in Grey and Bruce Counties. The Grey Bruce Multidisciplinary Eating Disorder Program provides community based treatment, both inpatient and outpatient, to clients experiencing eating disorders and their families. The program utilizes a multidisciplinary team approach, including the services of hospital and clinical based social workers, dieticians, paediatricians, school personnel and child and youth workers through a partnership between Keystone Child, Youth and Family Services, Grey Bruce Health Services, the Bluewater District School Board and the Bruce Grey Catholic District School Board. Program evaluation will continue to enhance and guide the development of the program, support partnerships, and enhance treatment approaches.

The Plan

A logic model will be created to guide the development of the evaluation framework and the research questions for this project. A review of literature will identify research outcomes in the treatment of eating disorders, relevant tools/clinical measures, and review community education directed at education professionals. A client file review will explore the demographic and clinical characteristics of clients receiving service from the program since the development of the program. Clinical measures/tools (Eating Disorder Inventory-3, Children’s Depressive Inventory, and Rosenberg Self-Esteem Scale) will be implemented into the program to measure effectiveness in reducing eating disorder and mental health symptoms. A pre/post questionnaire will be piloted with Bluewater District School Board educators to measure participant’s awareness and knowledge of eating disorders and the program prior to and following a presentation by the multidisciplinary team.
The Product

A number of process and outcome evaluation activities took place during the award term. A total of twenty-four files were reviewed to identify demographic and clinical characteristics of clients. A descriptive analysis of the final sample of 16 cases generated a composite clinical profile of clients receiving service through the Grey Bruce Multidisciplinary Eating Disorder Program. A sample of 91 educators completed pre/post questionnaires following the presentation “Eating Disorders-What’s a Parent/Teacher to do?” The sample reported significant (p > .05) increases in knowledge of eating disorders and the program following participation in the presentation. Clinical measures (EDI-3, CD1-2, SES) were implemented into the treatment of 4 eating disorder youth receiving service. Only one participant completed the follow up measures, therefore limiting our ability to correlate and analyze results. A case study approach will be used to examine these results, however, this will not be carried out within the timelines of the Evaluation Planning Grant.

This process not only generated increased understanding and skills in program evaluation, but also integrated the evaluation component into our thinking about our programs. Furthermore, participation in the grant educated our agency on the ethical review limitations within our community and has prompted investigation into developing a community ethics board. Several recommendations have been highlighted throughout this process, including: the need to build the use of measures into treatment for future evaluation, the need to develop evaluation frameworks for other programs through the capacity generated, a need to develop an evaluation consent for the entire organization, and the continued need to develop a research team within in our organization. All of these efforts will support the development of an evaluation culture within our organization and community. We have actively communicated our involvement and activities with the Evaluation Planning Grant throughout our organization, with community partners, with the Ontario Community Outreach Program for Eating Disorders, and our funders. Research summaries will be distributed to various stakeholders and community partners and will be presented to Keystone staff at the next professional development day. This activity will allow an opportunity to share information and increase understanding of research and the program, and engage stakeholders more fully in the evaluation process.

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Introduction

Description of the Program

The Grey Bruce Multi-Disciplinary Eating Disorder Program aims to provide a community-based, integrated response, to clients experiencing eating disorders and their families in their local rural area. The program employs the services of hospital and clinical based social workers, dieticians, paediatricians, school personnel and child and youth workers through a partnership between Keystone Child, Youth and Family Services, Grey Bruce Health Services, the Bluewater District School Board and the Bruce Grey Catholic District School Board. The goals of the program include: assessing the eating disorder and other issues; stabilizing the child or youth, either as an inpatient or outpatient; providing a multidisciplinary plan and treatment and/or aftercare in consultation with our multidisciplinary clinic; linking back to London Health Sciences at all levels of service, as appropriate; and developing and strengthening local expertise in treating eating disorders through training, collaboration, and consultation. We service direct referrals to the program by parents, referrals from the local hospital for both admitted patients and non-admitted patients, family doctors, addictions, schools, and London Health Sciences Eating Disorder Program. Funding for the program is provided by London Health Sciences, which is the tertiary care centre for Grey and Bruce counties. Keystone, Child, Youth & Family Services and Grey Bruce Health Services provide additional funding to the program through staffing, inpatient treatment, and additional services.

Prior to the development of the Grey Bruce Multidisciplinary Eating Disorder Program in 2009, Grey Bruce youth with eating disorder concerns have had to access inpatient and outpatient care out of area (London Health Sciences), as Grey Bruce has been lacking in funding and expertise to service them in their home community. In
addition, these youth have often been receiving service from Keystone Child, Youth and Family Services for other and related issues; therefore requiring teaming with the outreach worker from London Health Sciences. With the termination of this outreach position, Keystone found that they needed to build expertise within Grey Bruce and develop a program that could service clients with these issues, to the best of their ability, in their home community. Since the development of the program in fall 2009 we have served 24 clients.

The Grey Bruce Multi-Disciplinary Eating Disorder Program is a member of the Ontario Community Outreach Program for Eating Disorders (OCOPED), which provides training for community-based practitioners or educators who wish to get more training and education to better serve their patients with eating disorders. The OCOPED is coordinated by a Director and a steering committee comprised of the eating disorder program Directors from the University Health Network-Toronto General Hospital, The Hospital for Sick Children, and Lakehead University in Thunder Bay. The training provided by the OCOPED is based on an evidence-based model of care carried out at both Toronto General Hospital and The Hospital for Sick Children. Furthermore, knowledge generated from new research projects is shared on an ongoing basis with members through workshops, which allows information about current practices in treatment and prevention to be shared (Ontario Community Outreach Program for Eating Disorders, 2009). In September 2010 the Grey Bruce Multi-Disciplinary Eating Disorder team received 4 day intensive training through the OCOPED with The Hospital for Sick Children’s Eating Disorder Program and McMaster Children’s Hospital. The team also participates in Eating Disorder Professional Rounds for Toronto Practitioners through tele-conference and has monthly consults with Dr. Leora Pinhas (Psychiatric Director) through Tele-Link.
Target Population and Relevant Stakeholders

Clients receiving service through the program are children and youth between the ages of birth and 18, and their families, living in Grey Bruce who are experiencing eating disorder concerns. The primary activities of the program include: intake and assessment (including assessment of eating disorder and concurrent issues), stabilization and re-feeding, meal support, family therapy and support, school programming and support, the development of a volunteer base, psycho-educational sessions, community education, and multidisciplinary team building.

Relevant stakeholders, those who have an interest in the program being evaluated or in the results of the evaluation (The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO, 2010) for this evaluation include:

- Children, youth and families
- Program staff and supervisor
- Senior management (Executive Director/Program Director)
- Board members
- Paediatric Multi-Disciplinary Advisory Committee (Grey Bruce Health Services-Owen Sound Hospital (Paediatricians, Dieticians, Social Workers/ Bluewater District School Board/ Bruce Grey Catholic District School Board)
- London Health Sciences
- Professional Associations- Ontario Community Outreach Program for Eating Disorders
- Funders (Ministry of Child and Youth Services, Ministry of Health and Long-term Care)
- Other community agencies

Program Logic Model

A program logic model was developed through consultation between the program’s Executive Director, Director of Service, Supervisor, clinical staff, and project lead, with the support and direction of the CHEO consultant. The logic model focuses on the Grey Bruce Multi-Disciplinary Eating Disorder Program’s goal and how the program’s key components/activities support this goal. Refer to Appendix A-Program Logic Model.
Purpose of Evaluation and Evaluation Questions

Keystone Child, Youth and Family Services experience with evaluation to date, has been exclusive to our federally funded CAPC and CPNP programs, which have employed the services of professional evaluators. The organization has taken part in evaluation activities for several programs, often conducted by outside agencies, including evaluation of the Tele-Link program with the Hospital for Sick Children. As part of our Quality Assurance process within the organization, we participate in the evaluation of all our programs to some degree; however, lack of resources has meant that this evaluation is often not as in depth as we prefer. The purpose of this evaluation is to build and develop our evaluation capacity in order to use qualitative and quantitative data to measure program effectiveness in relation to the goals of the program and the needs of children, youth and families in Grey Bruce. The findings of this project will guide adjustments to the program and therefore improve program validity. Furthermore, the capacity developed through this project will support the planning, development, and evaluation of future programs and support partnering within the community.

Evaluation questions:

- Is community training/education effective in increasing awareness and knowledge of eating disorders and the program?
- Is the program successful in reducing eating disorder behaviours?
- Is there a reduction in client’s depressive symptoms?
- Is there an improvement in client’s self-esteem?
- Is there movement towards client’s ideal body weight?
- What are the demographic and clinical characteristics of clients?
Literature Review

The following literature review was conducted to identify current research outcomes and relevant tools in the treatment of eating disorders. Furthermore, this literature review will also examine community training and education related to eating disorders, a key component of the Grey Bruce Multi-Disciplinary Eating Disorder Program. For the purposes of this project, we have focused on community training and education for teachers and education professionals.

Anorexia nervosa (AN), bulimia nervosa, (BN) and eating disorder not otherwise specified (ED-Nos) are serious psychiatric conditions recognized by the DSM-IV (American Psychiatric Association, 2000). A large, non-clinical community sample (Garfinkel et al., 1995, 1996) established the prevalence of eating disorders in Ontario. Drawing from a sample of 8,116 individuals under the age of 65, the lifetime prevalence of BN was found to be 1.1% for female subjects and 0.1% for male subjects. The lifetime prevalence of AN was found to be 0.56% for females and 0.16% for males (Woodside, et al., 2001). Despite rates of disordered eating in youth rising (Jones, Bennet, Olmsted, Lawson, & Rodin, 2001; Reijonen, Pratt, Patel, & Greydanus, 2003), there continues to be limited information on the effectiveness of treatment for eating disorders (le Grange & Lock, 2005; Fairburn 2005; Wilson, Grilo, & Vitousek, 2007).

Research Outcomes

A review of the literature identified limited systematic research on the efficacy of treatment for eating disorders in youth, with much of the research specific to anorexia nervosa. For the purpose of this review, research outcomes for AN will be highlighted. Le Grange and Locke (2005) reviewed available studies to understand whether they highlight directions for future treatment and investigation. They identified that psychological treatment studies of anorexia nervosa can be divided into two categories;
uncontrolled studies for adolescents with AN and controlled trials for adolescents. The first of these uncontrolled studies treated a series of 53 patients and in their report provided details of the outcome for family therapy in a follow up of this cohort (Minuchin et al., 1975, Minuchin, Rosman, & Baker, 1978). Family therapy was the primary intervention for this group of patients, however treatments were mixed. For example, approximately one half of this group initially receives inpatient treatment in conjunction with family therapy and some adolescents also were seen individually while engaged in family therapy. The team reported remarkably high rates of success with this approach – 86% of the patients were reported recovered at the time of the follow-up. Prior to this study, previous accounts of the outcome for AN in adolescents and children had been much less optimistic (Blitzer, Rollings, & Blackwell, 1961; Lesser, Ashenden, Debuskey, & Eisenberg, 1960; Warren, 1968). Since the work of Munuchin’s team, a number of other uncontrolled cases series have been reported to support family treatments for adolescent AN, although only provisional conclusions can be drawn from uncontrolled studies that describe a relatively small combined series of cases (Dare, 1983; Martin, 1985; Stierlin & Weber, 1987, 1989; Mayer, 1994; Herscovici & Bay, 1996; Le Grange & Gelman, 1998; Wallin & Kronwall, 2002). These investigations have prepared the foundation for the family’s involvement in the treatment of adolescents with AN. A limited number of controlled randomized trials, all relatively small in sample size (combined N=141), have been conducted. The first since Minunchin’s work, was conducted at the Maudsley Hospital in London, and compared outpatient family therapy with individual supportive therapy after inpatient weight restoration (Russel, Szmukler, Dare, & Eisler, 1987). Studies have continued to compare different forms of family intervention in adolescents with AN (Eisler et al., 2000; Geist, Heineman, Stephens, Davis, & Katzman, 2000; Robin et al., 1999). According to most of these studies involving adolescents with
AN, family therapy is helpful in younger patients with a short duration of illness and that hospitalization is not a requirement for recovery for many of these patients. Family-based therapy appears to be the treatment of choice for adolescent AN. However, one must also acknowledged the lack of research on other treatments for AN, such as Cognitive Behavioural Therapy (CBT) or Psychodynamic treatments, which have been described in the literature, but not systematically been evaluated (Bowers, Evans, Le Grange, & Anderson, 2003; Jeammet & Chabert, 1998).

Relevant Tools

A review of the literature identified relevant tools/clinical measures that aid in both assessment and treatment of eating disorders and program evaluation and will be utilized in this study. These tools include the Eating Disorders Inventory (EDI-3), the Rosenberg Self-esteem scale (RES), and the Children’s Depression Inventory (CDI-2).

The Eating Disorder Inventory (latest version EDI-3) is one of the most frequently used self-report assessment measures (Williamson et al., 1996; Podar & Allik, 2009; Fennig & Hadas, 2010), is responsive to treatment, and uses many of the central domains of eating disorders, including binge eating and purging, body image disturbance, perfectionism, and drive for thinness (Anderson, Lundgren, Shapiro, & Paulosky, 2004; Tury, Gulec, & Kohls, 2010). The EDI-3 is widely used for both adults and adolescents and has demonstrated reliability and validity in multiple analysis’s since its original development in 1983 (Fennig & Hadas, 2010; Tury, Gulec, & Kohls, 2010).

Button, Sonuga-Barke, Davies, & Thompson (1996) and Shisslak, Crago, & Clark-Wagner (1998) identify a link between adolescent disordered eating and low-self esteem and more recent studies (Carter, Blackmore, Sutandar-Pinnock & Woodside, 2004; Drummond & Hare, 2004; Prichard, Bergin, & Wade, 2004; Eddy, et al., 2010) have included self-esteem measures in evaluation of efficacy of treatment for eating
disorders. The Rosenberg Self-Esteem Scale (RSE) is a self-report measure of overall self-esteem. The questionnaire is comprised of 10 items that are given in a 4-point Likert scale. Scores range from 0 to 30, scores lower than 15 suggest low self-esteem. This measure has demonstrated adequate validity and reliability in adolescents (Hagborg, 1996).

Depression is accepted as a central feature of eating disorders, affecting 25-52% of individuals with Anorexia Nervosa or Bulimia Nervosa (Fennig & Hadas, 2010). A correlation between depression and eating disorders has been identified in research, often as a result of starvation (Rome, et al., 2003; Fennig & Hadas, 2010). Multiple studies have utilized depression scales, including the Beck Depression Inventory (BDI) and the Children’s Depression Inventory (CDI) as a measure of effectiveness of treatment of eating disorders, with a decrease in depressive symptoms as an indicator (Geist, Davis, & Heinmaa, 1998; Ziphel, et al., 2002; Carter, Blackmore, Sutandar-Pinnock & Woodside, 2004; Keel & Haedt, 2008; Fennig & Hadas, 2010). The CDI-2 is a 28 item self-report measure of the severity of depressive symptoms appropriate for school-aged children and adolescents (aged 7-17). The CDI-2 also offers symptomatology questionnaires for teachers or parents. (Kovacs, 2011).

Community Training and Education

Community education directed at teachers and educational professionals has become prevalent in recent years (McVey, Davis, Tweed, & Shaw, 2004; Favaro, Zanetti, Huon, & Santonastaso, 2005; McVey, Gussella, Tweed, & Ferrari, 2009), as school has been recognized as an appropriate setting for the prevention of eating disorders due to the continual and concentrated access to a large number of children at a developmentally appropriate age (O’Dea, 2000; O’Dea & Abraham, 2000; Smolak, Harris, Levine, & Shisslak, 2001; Piran, 2004; Yager & O’Dea, 2005). A review of the
literature indicates a shift from prevention through providing direct instruction and information about eating disorders and problem eating, to a focus on fostering an environment in school where food and eating are promoted as fun, enjoyable, and non-threatening (O’Dea, 2000; Scime & Cook-Cottone, 2008; McVey, et al., 2005).

According to McVey, Gusella, Tweed, and Ferrari (2009) teachers require help to balance their messages about healthy eating and active living to avoid triggering weight or shape preoccupation among their students, given the natural tendency to transmit concerns about weight or shape onto children (McVey, Tweed & Ferrari, 2005). Surveys reveal that teachers desire practical tools, such as videos, pamphlets or guest speakers, to help them address issues related to the prevention of eating disorders with their students (Smolak, Levine, & Thompson, 2001).

Yager and O’Dea (2005) examined the important contribution that teachers and other educators have to offer in the prevention of eating disorders and obesity and highlight the need to examine how teachers and school personnel can be best prepared and trained. Yager and O’Dea highlight the current lack of knowledge and clearly defined roles, which may be linked to the current low level of teacher involvement in preventative efforts and the modest impact of school-based prevention initiatives. They emphasize that the clinical treatment of eating disorders should remain the role of trained professionals, while teachers can provide informal and formal opportunities for prevention and early detection of eating related issues. Furthermore, they identify the importance of education professionals being informed of proper referral processes for at-risk students. They identify that in-service training for school professionals should be direct at their personal and professional needs. Yager and O’dea recommend that education include a teacher training component, which stresses the importance of school professionals having a healthy body image and address’s appropriate weight.
control practices, in order to assure appropriate modeling and transference of these attitudes and behaviours to the many students in their care.

Both Neumark-Sztainer (1996) and O'Dea & Abraham (2000) identify that empowering teachers to build a healthy school climate can go a long way in helping to promote wellness and prevent unhealthy lifestyles. Furthermore, this research reveals that teacher efficacy is further enhanced if teachers feel that they are a part of a system that supports such efforts (McVey, Gusells, Tweed, & Ferrari, 2009).
Methodology

Development of the Evaluation Framework

The development of the evaluation framework was a collaborative process between multiple levels of Keystone staff, including the Project Lead, Executive Director, Counselling Team Director of Service, Eating Disorder Program Supervisor, and front line staff, consisting of program social workers and a child and youth worker. The Project Lead consulted with front line staff at bi-weekly team meetings and monthly tele-psychiatry consultations with Dr. Leora Pinhas (Program Consultant-Psychiatrist Sick Kids Hospital Eating Disorder Program). Non-Keystone team members, including the Paediatrician, Dietician, Paediatric Social Worker (Grey Bruce Health Services) and Behaviour Lead Teacher (Bluewater District School Board) also participated in this process through monthly Multi-disciplinary meetings. The Executive Director informed the Board of Directors of the CHEO Planning Evaluation Grant in September 2010 and provided evaluation updates at each meeting. Additional stakeholders, including London Health Sciences (funding source) and the Ontario Community Outreach Program for Eating Disorders, received regular updates about the program and evaluation by the program supervisor.

The initial planning session was facilitated by Sherry McGee, Research Associate from the Centre of Excellence for Child and Youth Mental Health on November 23, 2010. Participants included the Project Lead, Executive Director, Counselling Team Director of Service, Eating Disorder Program Supervisor, and 2 program social workers. This process had us review our program objectives/goals, service activities and program components, and determine short and long term outcomes. As this process continued over the next month a logic model was developed and reviewed by the full Keystone team identified above. (Refer to Appendix A). The
completed logic model guided the development of the evaluation matrices and thus the development of the research questions for this project. Both management and front-line staff brainstormed research questions collaboratively with the Project Lead, while being mindful of available resources, measures, and feasibility for our client population. The Project Lead consulted with the multidisciplinary team to finalize research questions, as their involvement in data collection is necessary in some instances.

Evaluation Design

The evaluation design of this study includes both process and outcome evaluations of the Grey Bruce Multidisciplinary Eating Disorder Program. Process evaluation focuses on the development, implementation, and/or service delivery of a program in order to understand the extent to which it is being delivered as intended, and the extent to which the target population is being reached, whereas outcome evaluation assesses the extent to which a program has been successful in terms of achieving the goals and objectives (The Provincial Centre of Excellence for Child and Mental Health at CHEO, 2010). Refer to Appendix B-Table 1.1: Process Evaluation Matrix and-Table 1.2: Outcome Evaluation Matrix for an overview of the evaluation design. Below is a summary of the evaluation questions, sampling, indicators and measures, data collection methods, and plans for data analysis.

Process Evaluation

The process component of this study is a quantitative approach designed to explore demographic and clinical characteristics of clients. The research question is:

- What are the demographic and clinical characteristics of clients?

The sample (estimated to be a total of 20 cases) will be drawn from all clients who received service through the Grey Bruce Multidisciplinary Eating Disorder Program between the development of the program (October 1, 2009) until November 1, 2011. A
structured compilation of client demographics and clinical characteristics will be generated using data from the Brief Child and Family Phone Interview (BCFPI), which occurs at intake of all clients, and through a review of client files. The BCFPI contains items on eating problems, including not maintaining weight, significant loss of weight, fear of being overweight, and disturbed thinking about body shape or weight in addition to demographic information and child and family functioning (Cunningham, Pettingill, & Boyle, 2006). Data will be compiled on the Keystone Case Review Form (Refer to Appendix C: Case Review Form). Refer to Appendix D-Table 1.3: Outcomes and Indicators Chart for additional details.

The Project Lead will analyze the aggregate results generated by the BCFPI software (standardized scores) and the data compiled in the Case Review Form using SPSS v. 20. Baseline results will be presented in frequencies to provide an overall description of the demographic and clinical characteristics of clients.

This component of the study is limited by the quality of file information, as the researcher using the tool is dependent on this. The missing data creates small and unequal sizes for examining demographic and clinical characteristics. Furthermore, the analysis of clinical characteristics is limited by the uncontrolled number of variables and factors in the treatment setting (ie. type of treatment, frequency of settings, length of treatment).

Outcome Evaluation

The outcome evaluation component of this study is a quantitative approach designed to explore the effectiveness of community education and training and the successfulness of the program in reducing eating disorder behaviours. The research questions are:
• Is community training/education effective in increasing awareness and knowledge of eating disorders and the program?
• Is the program successful in reducing eating disorder behaviours?
• Is there a reduction in client’s depressive symptoms?
• Is there an improvement in client’s’ self-esteem?
• Is there movement towards client’s ideal body weight?

The sample for the community education and training portion of the outcome evaluation will be drawn from the Bluewater District School Board staff (teachers/education assistants) who participate in the presentation by the Grey Bruce Multidisciplinary Eating Disorder Program, titled “Eating Disorders- What’s a Parent/Teacher to do?”, on their professional development days. The presentation took place on February 3, 2011 and June 6, 2011. There were a total of 91 participants. There was a 100% response rate, however 7 questionnaires were omitted due to substantial missing data. A pre/post questionnaire will be used to measure the participants’ awareness and knowledge of eating disorders and the program. The design of the questionnaire is both qualitative and quantitative in nature, using both ordinal levels of measurement (Strongly Agree, Agree, Disagree, Strongly Disagree, Don’t know) and open-ended questions (Refer to Appendix E: Community Education Questionnaire). The questionnaire contains 36 items and will accumulate data that is both statistical and descriptive. The Project lead will administer the questionnaire immediately before and after the presentation. Refer to Appendix D-Table 1.3: Outcomes and Indicators Chart for additional details.

Once returned, the Project Lead will examine each questionnaire for completeness and errors, record it on the spreadsheet as returned, and assign a number to keep track of participants. Wherever possible the questionnaire was pre-coded prior to distribution. However, in some questions the range of responses cannot be entirely
predicted beforehand (ie. List your current profession) and will be coded when the questionnaire are analyzed. The questionnaire data will be entered into SPSS v. 20 for statistical analysis. Qualitative, open-ended data, will be identified in the SPSS file with the values ‘1’ for yes to refer to a word processing file and ‘2’ for no, and then recorded in a word processing file for each item. The survey data will be analyzed for frequencies and comparative statistics and graphs and charts will be used to present this data.

Limitations of this component of the study should be recognized. The questionnaire is lacking a body of evidence to validate its use. Furthermore, the effectiveness of the presentation was assessed based on participants perceived level of knowledge and awareness in the area of eating disorders. Therefore, the questionnaire can only be used as a broad indicator of change.

The sample for the eating disorder treatment portion of the outcome evaluation will be drawn from clients receiving service from the Grey Bruce Multidisciplinary Eating Disordered program between May 2011 and September 2011. This population includes children and youth between the ages of birth and 18, and their families, living in Grey Bruce who are experiencing eating disorder concerns and accessing treatment through Keystone Child, Youth & Family Services. All clients participating will receive the Family Information Letter and Consent Form (Refer to Appendix F). The case manager will explain the study, answer any questions related to participation, and make clear to each participant that his/her participation is voluntary, that he/she may refuse to participate in any part of the study, and that he/she may withdraw from the study at any point in time. The Project Lead will ensure that each participant and/or parent has signed the consent forms. Standardized clinical measures will be used to evaluate the effectiveness of treatment, including a reduction of eating disorder behaviours, a reduction in depressive symptoms, an increase in self-esteem, and movement towards ideal body weight.
Participants will complete self-report clinical measure within the first month of treatment and at a three-month follow-up and the physician and case manager will track weight progression in kilograms. The clinical measures that will be utilized include:

- **Eating Disorder Inventory (EDI-3).** The EDI-3, a revision of the widely used EDI-2, measures psychological traits associated with eating disorders. It is a self-report inventory that is administered in approximately 20 minutes. The inventory consists of 91 items organized into 12 primary scales that yield six composite scores: eating disorder, risk ineffectiveness, interpersonal problems, affective problems, overcontrol, and general psychological maladjustment. The EDI-3 norms are based on a sample of females with eating disorders, aged 13-53 years and was collected in both inpatient and outpatient settings (Garner, 2004).

- **Children’s Depressive Inventory (CDI-2).** The CDI-2, a revision of CDI, evaluates depressive symptoms in children and adolescents, aged 7 to 17 years. The CDI-2 can aid in the early identification of depressive symptoms, the diagnosis of depression and related disorders, as well as, the monitoring of treatment effectiveness. This project with utilize the self-report version, which is administered in 5-15 minutes and consists of 28 items that yield a total score, two scale scores (emotional problems and functional problems), and four subscales scores (negative mood, negative self-esteem, ineffectiveness, and interpersonal problems). The CDI-2 norms are base on a nationally representative sample of 1,100 children and teens from 26 U.S states, with equal representation of males and females at each level (Kovacs, 2011).

- **Rosenberg Self-Esteem Scale (SES).** The SES is a unidimensional measure of global self-esteem. The scale is a self-report measure, which is a 10-item Likert scale with items answered on a four-point scale, from strongly agree to strongly
disagree. The scale ranges from 0 –30, with 30 indicating the highest score possible, or the highest self-esteem. The original sample for which the scale was developed consisted of 5,024 high school juniors and seniors from 10 randomly selected school in New York State (Rosenberg, 1965).

Each clinical measure will be scored by Keystone’s Assessment Services Facilitator or Project Lead and entered into SPSS v. 20. Weight progression will be charted and also entered into SPSS for statistical analysis. Data will be analyzed using descriptive statistics (frequency data and chi-square analysis) and comparisons will be performed using paired t-tests. Statistical analysis for significance will also be explored and reported.

Limitations of this component of the project include lack of control group and the number of participants. The lack of control of variables makes it challenging to pinpoint the specific intervention(s) that influence the changes we observe. The small sample size influences the statistical power of the analyses. Additional limitations include the length of the study, as well as, our reliance on self-report measures, which are accompanied by inherent limits. Furthermore, The SES does not convey a significant amount of clinical information and requires the research to identify norms for their specific population.

Ethical Approval

Ethical approval was obtained through an informal ethics review, which was conducted on April 15th, 2011. Participants included: Sandy Erb, Keystone Assessment Services Facilitator, Dr. Ewan Porter, Paediatrician from Grey Bruce Health Services, and Dr. Leora Pinhas, Program Consultant-Psychiatrist Sick Kids Hospital Eating Disorder Program.
Pilot Results

Process Evaluation

Demographic and Clinical Characteristics of Clients

The sample included a total of 24 cases (client’s receiving service through the Grey Bruce Multidisciplinary Eating Disorder Program between October 1, 2009 until November 1, 2011). A total of 8 cases were omitted from the analysis due to limited file information, non eating disorder issues (i.e. obesity, food swallowing anxiety, etc), or not participating in service past the assessment phase. Therefore, the sample size was 16. Demographic and clinical characteristics of clients will be presented using baseline frequencies analyzed using SPSS v. 20. Refer to Appendix G-Table 2.1:Summary of Demographic Characteristics and Table 2.2: Summary of Clinical Characteristics.

Table 2.1 summarizes the demographic characteristics of the study sample. The age of the sample ranges from 12-17, with the mean age at intake being 15 (SD=1.54). There was only 1 male client who received service from the program. Sixty-eight percent of client’s parents were married, while 31% percent were separated. Almost half of the sample reported family income as being greater than $60,000 (43.8%). Half (50%) of the sample identified child/youths’ grade average as A, with only 1 (6.3%) with an average lower than a C.

Table 2.2 summarizes the clinical characteristics of the study sample. Of the sample, half (50%) were referred by their parents, Grey Bruce Health Services referred 25% percent, 18.8% were referred by their family physician, and 1 (6.3%) was referred by London Health Sciences. Sixty-eight percent of the sample received weekly counselling, 18.8% received bi-weekly counselling, and 12.5% received ‘other’ frequencies of service. Nine (56.3%) of the clients are currently engaged in service through the Grey Bruce Multidisciplinary Eating Disorder Program at this time. Twenty-
five percent of the sample was engaged in service for 0-6 months, and 6.3% were engaged for 7-12 months, over 1 year, and over 2 years. Refer to Figure 1: Members of Clinical Team for an overview of the clinical teams providing service to the sample. Table 2.2 identifies that 43.8% of the sample had a diagnosis of Anorexia Nervosa-Restrictive Subtype, 31.3% had a diagnosis of Eating Disorder Not Otherwise Specified, 6.3% had a diagnosis of Bulimia Nervosa, and 6.3% had a diagnosis of Generalized Anxiety Disorder with disordered eating. The mean weight at referral was 46.4kg. Five (31.3%) clients in the sample had a concurrent mental health diagnosis, which included Generalized Anxiety Disorder, Social Anxiety Disorder, Major Depressive Disorder, and Attention Deficit Hyperactivity Disorder (ADHD). Seven (43.8%) of the sample had a history of suicidal behaviour and received medication as a part of his/her treatment. Of the 16 clients in the sample, half (50%) received inpatient treatment for their eating disorder; 31.3% at Grey Bruce Health Services and 18.8% at London Health Sciences. Approximately 31% of the sample was admitted to impatient treatment for over 30 days.

Figure 2 represents the mean t-scores of the sample according to BCFPI results at intake. The BCFPI compares an individual child/youth’s scores to random population sample of children from the Ontario Child Health Study’s revised measurement project (Boyle et al., 1993). The scores of 50% of the population are lower than a t-score of 50; a score at or above the 65th but below the 70th percentile is considered a borderline score; and scores of approximately 98% of the population are lower than a t-score of 70. Higher t-scores indicate greater impairment in functioning. Due to the fact that at this time the BCFPI questionnaire is only completed at intake, this data represents a description of clinical characteristics of clients, rather than service outcome. The graph identifies borderline functioning (69.32) in managing mood and global functioning, and impairment (75.71) in the self-harm domain. The global functioning subscale reflects
social participation, quality of relationships, and school performance/achievement. The managing mood subscale reflects interest or enjoyment in life and general mood. The self-harm subscale reflects weight loss, suicide talk, or suicide attempts. The final score in the impairment range is informant (parent) mood, which reflects parental symptoms of depression.

Outcome Evaluation

Findings from Community Training and Education

The findings are presented using comparative statistics to identify if community training/education was effective in increasing awareness and knowledge of eating disorders and the program.

The questionnaire was divided into 3 major sections. The first section, which was completed prior to the presentation, asked respondents to identify their current knowledge of eating disorders, their involvement in body image curriculum, and understanding of eating disorder services in Grey Bruce. The second section, which was completed following the presentation, asked respondents to rate the same areas based on the information presented. The final section asked respondents to comment on organization, delivery, and content of the presentation. For the purposes of this project the final section will not be presented and evaluated. The presentation took place on February 3, 2011 and June 6, 2011. There were a total of 91 participants. Refer to Figure 3: Participants According to Profession. There was a 100% response rate, however 7 questionnaires were omitted due to substantial missing data.

A paired samples t-test was used to compare the participants mean ratings for their perceived knowledge of eating disorders, services, and referrals with the same variables following participation in the presentation. Refer to Appendix I – Table 2.3: Means and Standard Deviation for Participants Outcome Measure Scores Pre/Post
Presentation. Upon completion of the presentation, participants reported significant (p > .05) increases in the following dimensions: knowledge of eating disorders (m=.45238, p=.000); view of eating disorders as a mental health issue (m=.16667, p=.022); confidence in recognizing warning signs (m=.27500, p=.010); confidence in knowing how to respond to disordered eating concerns (m=.69136, p = .000); awareness of eating disorder services in Grey Bruce (m=1.14286, p=.000); knowledge of how to make a referral (m=1.13253, p=.000); and knowledge of who to call with questions or for additional information (m=1.06024, p=.000). Refer to Appendix I- Table 2.4: Paired Samples Test for Participants Outcome Measure Scores Pre/Post Presentation. Therefore; the presentation was effective in increasing awareness and knowledge of eating disorders and the program.

In addition to measuring participants’ knowledge and understanding of the program, participants were also asked to comment on whether the information provided in the presentation would influence their day-to-day work. Sixty-nine percent of participants identified that the presentation would influence their day-to-day work. Some specific comments include:

“Yes. I will be very careful of what I say in class and how I will present material on healthy eating and activity.”

“Yes. Change some aims of programming, idea of healthy choices, less on the negatives.”

“Be mindful, be aware, be observant, be prepared to listen, make relevant and useful observations, be positive, useful in my interventions, offer properly constructed messages.”

“Yes. I will use the strategies suggested to make our classroom/school more aware.”

“Yes. This helps me feel more confident in approaching families about concerns with eating disorders.”
Findings from Treatment

The findings for the treatment portion of the evaluation, which was to evaluate the successfulness of the program in reducing eating disorder behaviours, will not be presented in this project, due to a number of challenges. The research questions that will not be addressed include:

- Is the program successful in reducing eating disorder behaviours?
- Is there a reduction in client’s depressive symptoms?
- Is there an improvement in client’s’ self-esteem?
- Is there movement towards client’s ideal body weight?

The use of standardized clinical measures was not previously built into our treatment process, causing us to have a limited sample size, as data collection could only begin in summer 2011. In that time we only had a total of 4 eating disordered youth access the program. Furthermore, we had a total of 4 participants who completed the initial clinical measures, and only 1 that completed the initial scores and 3-month follow-up scores. Three of the 4 participants refused to complete the follow-up scores or sign consent for the project. In discussion with the eating disorder team, we hypothesize that their refusal to participate may be an element of control related to their eating disordered thinking.

Given the challenges in moving forward with this section of the project we will do a case study approach of the one participant who completed initial and follow-up scores; however, this will not be carried out within the timelines of the Evaluation Planning Grant. The next session will identify additional challenges and plans to address these challenges.

Challenges and Areas to be Addressed

A number of challenges were encountered within the development and implementation of this research project. In addition to the challenges identified above,
the team encountered significant challenges related to accessing a formal ethics review community, given our rural and geographical location. The team completed an informal ethics review within the organization, with hopes to access an external review through Grey Bruce Health Services, the Community Ethics Review Board, or Kinark Child and Family Services. Despite multiple meetings, contacts, and communications, all of these opportunities fell through within the given timeline for this project. In order to address this need for our agency and community, we are currently communicating with Kinark Child and Family Services about joining their formal REB committee.

During the file review component of the study, it became evident that when eating disordered clients are admitted to hospital prior to or in conjunction with their referral to Keystone, BCFPI data is not collected at intake, explaining the three missing data subsets. Given the emergent nature of these admissions, it is not unrealistic to believe this will continue to happen. However, protocol to complete the BCFPI within a week of the referral will be implemented to avoid missing data in the future.

In order to address the challenges identified in the previous section, related to small sample size, gathering data through clinical measures and consent, a number of changes are currently underway at our organization related to the Grey Bruce Multidiscipline Eating Disorder Program and future evaluation at Keystone. The completion of clinical measures is now built into the treatment plan of all eating disorder clients at initial service, 6-month follow-up, and service completion. Furthermore, the organization is currently in the process of developing a research and evaluation consent that all Keystone clients will be asked to sign at intake and assessment.
Conclusion & Recommendations/Next Steps

Discussion and Interpretation of Findings

Demographic and Clinical Characteristics of Clients

From the descriptive analysis, we can create a composite clinical profile of clients receiving service through the Grey Bruce Multidisciplinary Eating Disorder Program. The composite inpatient client is a female, who is 15 years of age, with a diagnosis of Anorexia Nervosa-Restrictive Subtype. She may be hospitalized for inpatient treatment, most likely at Grey Bruce Health Services, and would stay for over 30 days. Her clinical team would include a Keystone Social Worker/Child & Youth Worker, Pediatrician, Pediatric Social Worker, and Dietician. She has borderline functioning in managing mood (enjoyment in life and general mood) and global functioning (social participation, quality of relationships, and school performance/achievement). She has thoughts regarding self-harm (weight loss, suicide talk, or suicide attempts).

With a mean age of 15, and almost half of clients (43.8%) over the age of 16, these characteristics highlight implications for both treatment of eating disorders and the program. Research reveals higher rates of success in treatment of anorexia nervosa with use of, or in conjunction with, a family approach (Mayer, 1994; le Grange & Gelman, 1998; Wallin & Kronwall, 2002; le Grange & Locke, 2005). Furthermore, research identifies that family therapy is helpful for younger patients, with a short duration of illness, with hospitalization not a requirement of recovery (Eisler et al. 2000; Geist, Heineman, Stephens, Davis, & Katzman, 2000; Robin et al., 1999). Family treatment becomes increasingly difficult following the eating disordered youth’s transition into the adult system, where parents are no longer making decisions and guiding treatment. Within the program this highlights the heightened need for intensive treatment and/or hospitalization of our clients.
Analysis of the clinical characteristics of the sample also revealed significant program information about referral sources, frequency of counselling sessions, length of service, and members of the clinical team. This data not only highlighted the different points of access to the program, but also the intensiveness of treatment and our ability to service eating disordered clients in Grey Bruce, a primary goal of the program. Analysis revealed that 68% of the sample received weekly counselling sessions, further emphasizing the intensive work needed, which has large implications for the program’s resources. In addition, the data identifies the successful use of Grey Bruce Health Services for inpatient treatment and the use of the inter-agency/organization multidisciplinary team approach, which are both unique in our community. The presentation of these findings to stakeholders and funding sources could have significant effects on our ability to continue to service this high-need population and participate in future evaluation.

Community Training and Education

Results from the community training and education analysis identified a significant increase in educators’ awareness and knowledge of eating disorders and the program following their participation in the presentation. Furthermore, educators identified an increase in their own confidence in recognizing warning signs or concerns related to disordered eating, with an increase in knowledge of how to respond. Similar to Yager and O’Dea (2005), this study highlighted educators’ previously limited knowledge of eating disorders and roles, which may be linked to the current low level of teacher involvement in preventative efforts and early detection of eating related issues.

More than half of participants (69%) also indicated that the presentation would influence their day-to-day work, including the material they present in class, the messages they convey, and how they approach and respond to disordered eating
concerns. These findings further support the importance of community training and education, as they correlate with McVey, Gusella, Tweed, and Ferrari’s (2009) identification that teachers require help to balance their messages about healthy eating and active living to avoid triggering weight or shape preoccupation among their students. Future work should examine whether the increase in knowledge and understanding of disordered eating within the school environment leads to improved treatment partnerships and results, as well as prevention.

Further to the increase in eating disorder knowledge, it is hoped that the significant increase in educators understanding of services available to eating disordered youth in Grey Bruce and the improvement in participants understanding of how to support families in accessing services and making a referral, will enhance educators as a part of the system that supports such efforts and therefore improves efficacy.

Recommendations/Next Steps

The experience of developing an evaluation framework and conducting a pilot for the Grey Bruce Multidisciplinary Eating Disorder Program through the Centre of Excellence Evaluation Planning Grant was instrumental for both the program and our organization. The process integrated the evaluation component into our thinking about the program itself, allowing for further development of the program through highlighting both shortfalls and successes. The pilot component of the project supported the agencies integration of clinical measures into the treatment of eating disordered youth, as well as highlighted the need for the standardized use of clinical measures for all programs, so as to not limit our evaluation capacity in the future. Furthermore, the experience also highlighted the importance of utilizing a Research Ethics Board (REB) in planning and conducting research and the limited availability to rural community agencies in areas that do not have affiliation or access to a University or other REB’s.
This experience highlighted the need to create a community REB in Grey and Bruce Counties that our organization, and other community agencies can access.

A number of recommendations have been highlighted throughout this process. In order to continue to build capacity within the organization, as well as serve clients better in our community through the evaluation of programs, we will need to actively pursue the continued development of a research team at our organization, and invite our community partners to participate in the process, when possible, to build overall capacity for evaluation in our community. With the development of this team it will be integral to engage members in the development of evaluation frameworks for additional programs at our organization, with support of the knowledge and material gained from participating in this grant. As outlined earlier, participation in this grant, and the subsequent difficulty we had in completing the treatment portion of the project, highlighted the need to use standardized measures within the eating disorder program, as well as other programs, as a part of the treatment process. Furthermore, we will develop a research and evaluation consent that all Keystone clients will be asked to sign during intake and assessment. It is hoped, that as these areas continue to develop, we will pursue submitting an application for the Doing Evaluation Grant, as we are eager to continue to develop an “evaluation culture” within our organization.
Knowledge Exchange

We have actively communicated our involvement and activities with the Evaluation Planning Grant throughout our organization, with community partners, with the Ontario Community Outreach Program for Eating Disorders, and our funders. The frontline service providers, supervisor, manager, and executive director participated in the development of the logic model, evaluation matrices, and outcomes and indicators charts, which guided the evaluation framework. The team participated in monthly research meetings in which this writer disseminated information related to the development of the evaluation framework and received process updates, provide feedback, and discuss challenges and areas of difficulty. Our executive director has provided frequent updates to the Board of Directors at meetings, provided updates to London Health Sciences and the Ministry of Child and Youth Services, and kept all staff up to date on the evaluation process through his monthly Executive Director Reports. The team has updated the Ontario Community Outreach Program for Eating Disorders on the evaluation process through monthly consults with Dr. Leora Pinhas.

The organization plans to create research summaries that can be distributed to the various stakeholders and community partners. It is hoped that this will not only allow an opportunity to share information and increase understanding of research and the program, but also engage stakeholders more fully in the evaluation process and support additional decision making related to the program. Furthermore, the summary will be presented to all Keystone staff at the next Keystone Strategic Planning Day in the upcoming year. This will provide an opportunity to share results and continue to develop evaluation capacity and interest within the organization. It is also hoped that the organization can participate in the Annual Provincial Network Meeting for Eating Disorder Service Providers to further exchange information and implement knowledge
into practice. Finally, there is potential to use our collected data through knowledge exchange activities to make improvements in program delivery and effectiveness, develop additional partnerships, and further support the continued treatment to eating disordered youth in their local rural area.
References


Appendix A- Program Logic Model

Target Population: Children and youth between the ages of 0 and 18, and their families, living in Grey Bruce who are experiencing eating disorder concerns

Grey Bruce Multidisciplinary Eating Disorder Program

Activities
- Intake & assessment
- Meal support
- Stabilization & re-feeding
- Family-based therapy & support
- School programming & support
- Psychological educational session
- Community education
- Multi-disciplinary team building

Short-term Outcomes
- Increased client knowledge & awareness of treatment path
- Increased feelings of support in treatment plan
- Increased client buy-in to treatment path
- Increased body weight in client
- Improved normalization around client eating behaviours & attitudes
- Improved healthy body image, reduction of disordered body images
- Improved mental health
- Improved capacity in strategies, skills, and tools
- Improved capacity of family & doctors to be involved in treatment process
- Improved efficiency & effectiveness in referral process
- Increased mobilization to participate in the change process
- Increased buy-in to treatment path
- Increased family understanding & legitimation of the disorder
- Increased awareness & knowledge in families & family educators
- Enhanced doctor buy-in to treatment path
- Enhanced doctor buy-in to the treatment path
- Enhanced buy-in to treatment path
- Enhanced capacity to conduct a coordinated treatment
- Enhanced capacity across sectors
- Increased communication across sectors
- Enhanced leadership across sectors
- Reduced morbidity and mortality

Goal
Develop and maintain programming that comprehensively supports clients in achieving a healthy, well-balanced lifestyle.
## Appendix B

### Table 1.1: Process Evaluation Matrix

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Activities</th>
<th>Indicator (s)</th>
<th>Measurement Tool</th>
<th>Method to Collect Data &amp; Frequency</th>
<th>Person Responsible for data collection? Data source?</th>
<th>Dates of data collection (specify month/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the demographic and clinical characteristics of clients?</td>
<td>Intake and Assessment.</td>
<td>Structured compilation of client demographics and clinical characteristics.</td>
<td>BCFPI</td>
<td>Client file review.</td>
<td>Project Lead</td>
<td>July-November 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Case Review Form</td>
<td></td>
<td></td>
<td>Data Source: Keystone Eating Disorder Client files.</td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

### Table 1.2: Outcome Evaluation Matrix

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Short-Term Outcomes</th>
<th>Indicator (s)</th>
<th>Measurement Tool</th>
<th>Method to Collect Data &amp; Frequency</th>
<th>Person Responsible for data collection? Data source?</th>
<th>Dates of data collection (specify month/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is community training/education effective in increasing awareness and knowledge of eating disorders and the program?</td>
<td>Increased awareness and knowledge in families, community services, and family educators.</td>
<td>Test scores-post training.</td>
<td>Pre/post questionnaire. Refer to Appendix ____</td>
<td>Administer questionnaire pre and post training session for all training sessions between January 1, 2011 and July 1, 2011</td>
<td>Project lead will administer questionnaires immediately before and after training. Data Source: -BWDSB educators.</td>
<td>-February 3, 2011. (BWDSB Elementary Professional Development Day) -June 6, 2011. (BWDSB Secondary Professional Development Day).</td>
</tr>
<tr>
<td>Evaluation Questions</td>
<td>Short-Term Outcomes</td>
<td>Indicator(s)</td>
<td>Measurement Tool</td>
<td>Method to Collect Data &amp; Frequency</td>
<td>Person Responsible for data collection? Data source?</td>
<td>Dates of data collection (specify month/year)</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Is the program successful in reducing eating disorder behaviours? | Increased body weight in client.  
Improved normalization around client eating behaviours and attitudes.  
Improved body image, reduction of disordered body images.  
Improved mental health. | Scores on clinical measures of eating disorder symptoms.  
Number of binges identified.  
Number of purges identified.  
Clinical scores on depressive symptom inventory.  
Clinical scores on self-report self-esteem scale. | CAFAS  
Eating Disorders Inventory (EDI-3)  
Children’s Depression Inventory (CDI)  
Rosenberg Self-Esteem Scale. | Administer clinical questionnaires within first month of assessment/treatment and at a 3-month follow up. | Case manager.  
Assessment Services Facilitator or Project Lead will score results.  
Data Source: client. | May 2011-September 2011 |
| Is there a reduction in client’s depressive symptoms? |                                                                                      |                                                                                                        |                                                                                                   |                                                                                                     |                                                                                                     |                                                      |
| Is there an improvement in client’s self-esteem?          |                                                                                      |                                                                                                        |                                                                                                   |                                                                                                     |                                                                                                     |                                                      |
Improved mental capacity and health.  
Reduced morbidity and mortality. | Pre/post measure of weight in kgs.                                                                 | Scale                                                                                              | Physician will weigh client at each visit (or if hospitalized-daily) and case manager will track results. | Physician and Case manager.                                                                 | March 2011-September 2011 |
Appendix C: Case Review Form

Case Report Form (CRF)

Study Title: The Grey Bruce Multidisciplinary Eating Disorder Program Planning Evaluation Grant (EPG-1349)

Participant ID code: __________________

Demographic Information:

Date of birth (DD/MM/YY): _______/_______/_______/

Gender:  □ Male       □ Female

Ethnicity: ___________________________

Diagnoses: ___________________________    Age at diagnosis:_______

                                      ___________________________
                                      ___________________________
                                      ___________________________

Referral Source: _______________________

When did child/youth start counselling with Keystone Child, Youth & Family Services (DD/MM/YY):

_______/_______/_______/

When did child/youth end counselling with Keystone Child, Youth & Family Services (if applicable) (DD/MM/YY):

_______/_______/_______/

List all members of the child’s clinical team. For confidentiality purposes, please only include type of profession (e.g, psychologist, counsellor, child & youth worker, dietician etc). Do not include the names of team members.

Reviewer’s initials _____
Please review the child's clinical file and answer the following questions:

**Weight and Medication:**

Weight at referral: _____ kg.  Height:_____

Weight at service completion: ______ kg.

**Weight Control Methods:**

<table>
<thead>
<tr>
<th>Method</th>
<th>Describe Frequency/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Restriction</td>
<td></td>
</tr>
<tr>
<td>Bingeing</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
</tr>
<tr>
<td>Laxatives</td>
<td></td>
</tr>
<tr>
<td>Diuretics</td>
<td></td>
</tr>
<tr>
<td>Diet Pills</td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td></td>
</tr>
</tbody>
</table>

Medications:__________________________________

__________________________________

**Prior Treatment for this condition:**

Inpatient:  Y / N  Where:____________________Date:_______________

Length of stay (days): ___1-7     ____8-14     ____15-21     ____22-28     ____30+

Outpatient:  Y / N  Provider:___________________Date:_______________

History of suicidal behaviour?  Y / N

Is the child/youth currently abusing alcohol or other drugs?  Y / N
Family Demographics/Characteristics:

Biological parents are:

_____married  _____separated  _____divorced  _____single parent  _____widowed

If divorced, has custody been established:  Y / N

Who has custody?

_____Mother
_____Father
_____Joint
_____CAS  Please Describe:________________________________________
_____Other Please Specify:_________________________________________

How frequently does child/youth see the non-custodial parent(s), if applicable?

____________________________________________________________________
____________________________________________________________________

Who does the child live with? (please check as many as apply)

_____Mother
_____Father
_____Stepmother
_____Stepfather
_____Foster family
_____CAS Custody
_____Guardian
_____Relatives

Housing Status

_____Private home
_____Private apartment
_____Ontario Housing
_____Hostel or Shelter
_____Non-profit housing
_____Other:__________

Educational History:

Child/youth’s academic grade average?

A  B  C  D
Case Report Form (CRF)

Study Title: The Grey Bruce Multidisciplinary Eating Disorder Program Planning Evaluation Grant (EPG-1349)

Participant ID code: ______________

Please describe any school or learning difficulties/disabilities:
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Does child/youth have difficulty making friends? Y / N

Does child/youth have difficulty maintaining friends? Y / N

Counselling:

1. How often does the child meet with a member of their clinical team for counselling purposes? Please provide dates of each session and the team members who are present at each session.

2. Are child-specific goals identified during counselling sessions? If yes, please list goals.
3. Is there criteria by which progress on these child-specific goals will be evaluated?

If yes, please list how goal progress will be monitored.

4. Additional comments by evaluator regarding counselling sessions:

Additional Programs:

Is the child involved in any programs outside of counselling? If yes, please list all programs.

**BCFPI Scores**

Please report the child’s BCFPI scores (0-3) for the following domains (t-scores).

N/S = a score for this domain was not recorded in the file.

**(DD/MM/YY):**

______/______/______/______/______/______

Highest level of parent (intake caller’s) education completed:
1 2 3 4 5 6 7 8 9 N/S

Highest level of spouse’s education completed:
1 2 3 4 5 6 7 8 9 N/S

Total family income over the past year:
1 2 3 4 5 6 7 8 N/S

Regulating Attention, Impulsivity and Activity Level (RAIAp):
____

5 of 6  Reviewer’s initials ______
Cooperativeness (Cop)

___

Conduct (CDp)

___

Separation from Parents (SPp)

___

Managing Anxiety (MAp)

___

Managing Mood (MMp)

___

Managing Mood and self-harm indicators (SHp)

___

Internalizing (Inp)

___

Global Functioning of child/youth (ChFP)

___

Informant Mood (PMMp)

___

Family Functioning (FADp)

___

Additional comments by evaluator regarding child’s BCFPI scores:


Overall comments by evaluator regarding child’s clinical file:


Name of evaluator (please print): _____________________________________________

Signature of evaluator:_________________________ Date:___________________

6 of 6 Reviewer’s initials ______
### Table 1.3: Outcome and Indicators Chart

<table>
<thead>
<tr>
<th>Evaluation Focus</th>
<th>Evaluation Questions</th>
<th>Indicators</th>
<th>Sources</th>
<th>Data Responsibility</th>
<th>Methods</th>
<th>Timeline</th>
<th>Analysis</th>
<th>Costs &amp; Assigned Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROCESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Melissa Chalmers</td>
</tr>
<tr>
<td><strong>OUTCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Melissa Chalmers</td>
</tr>
<tr>
<td>Community Education</td>
<td>Is community training/education effective in increasing awareness and knowledge of eating disorders? and the program?</td>
<td>Test scores-post training.</td>
<td>BWDSB educators.</td>
<td>Project lead</td>
<td>Self-report pre/post questionnaire. <em>Presentation: Eating Disorders- What’s a Parent/Teacher to do?</em></td>
<td>Project lead will administer questionnaires immediately before and after training. -2 training sessions (February 3 &amp; June 6, 2011)</td>
<td>Project lead will collate and analyze results using SPSS. September, 2011</td>
<td></td>
</tr>
<tr>
<td>Reduction in eating disorder behaviours</td>
<td>Is the program successful in reducing eating disorder behaviours?</td>
<td>Improved scores on clinical measures.</td>
<td>Client</td>
<td>Case manager will support client in completing self-report questionnaires</td>
<td>Eating Disorders Inventory (EDI-3) Children’s Depression Inventory (CDI) Rosenberg Self-Esteem Scale.</td>
<td>Administer clinical questionnaires within first month of assessment/treatment and at a 3-month follow up.</td>
<td>Assessment Services Facilitator or Project Lead will score results.</td>
<td>Melissa Chalmers</td>
</tr>
<tr>
<td></td>
<td>Is there a reduction in client’s depressive symptoms?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Project lead will collate and analyze results using SPSS. October 2011.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is there an improvement in client’s self-esteem?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is there movement towards client’s ideal body weight?</td>
<td>Movement toward targeted ideal BMI.</td>
<td>Physician</td>
<td>Case Manager Scale</td>
<td>Scale</td>
<td>Physician will weigh client at each visit and case manager will track results.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Community Education Questionnaire

Presentation: Eating Disorders- What's a Parent/Teacher to do?

Presented by the Grey Bruce Multidisciplinary Eating Disorder Program a joint project with the Bluewater District School Board, Bruce Grey Catholic District School Board, Keystone Child Youth and Family Services and Grey Bruce Health Services.

Please take a few minutes to complete this questionnaire (Part 1 before the presentation and Part 2 and Part 3 after the presentation) and return it at the end of the presentation. Your comments and questions will help to improve this presentation and contribute to our evaluation of the Grey Bruce Multidisciplinary Eating Disorder Program.

Thank You!

Part 1 (To be completed at the beginning of the presentation.)

Please rate the following (x):

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have significant knowledge of Eating Disorders.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Anorexia Nervosa and Bulimia are mental health issues.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel confident in my ability to recognize warning signs of an eating disorder.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>If I had disordered eating concerns about a child/youth I feel confident in knowing how to respond.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Within my profession I have little influence towards disordered eating.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Within my profession I do not have a role in the treatment of eating disorders.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am not active, nor intending to be, in teaching body image curriculum (or conducting other prevention strategies to help children develop positive body image and reduce their risk for developing unhealthy eating behaviours).</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am planning on teaching body image curriculum (or conducting other prevention strategies to help children develop positive body image and reduce their risk for developing unhealthy eating behaviours).</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Don’t Know</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>----------</td>
<td>-------------------</td>
<td>------------</td>
</tr>
<tr>
<td>I am aware of the eating disorder services in Grey Bruce.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I had disordered eating concerns about a child/youth today, I would be able to direct parents on how to make a referral.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I had questions about eating disorders today, I would know whom to call with questions or for additional information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please describe what you would do if you had concerns that a child/youth had an eating disorder.
______________________________________________________________________________
______________________________________________________________________________

**Part 2 (To be completed after the presentation)**

Please rate the following (x):

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have significant knowledge of Eating Disorders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anorexia Nervosa and Bulimia are mental health issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel confident in my ability to recognize warning signs of an eating disorder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I had disordered eating concerns about a child/youth I feel confident in knowing how to respond.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within my profession I have little influence towards disordered eating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within my profession I do not have a role in the treatment of eating disorders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not active, nor intending to be, in teaching body image curriculum (or conducting other prevention strategies to help children develop positive body image and reduce their risk for developing unhealthy eating behaviours).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been teaching body image curriculum (or conducting other prevention strategies to help children develop positive body image and reduce their risk for developing unhealthy eating behaviours).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Don’t Know</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
<td>----------</td>
<td>-------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>I am aware of the eating disorder services in Grey Bruce.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>If I had disordered eating concerns about a child/youth today, I would be able to direct parents on how to make a referral.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>If I had questions about eating disorders today, I would know whom to call with questions or for additional information.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>

Please describe what you would do if you had concerns that a child/youth had an eating disorder.

______________________________________________________________________________
______________________________________________________________________________

**Part 3 (To be completed after the presentation.)**

Please rate the following (x):

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic of the presentation was relevant.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The depth of information was appropriate to my learning needs.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Information was well organized, clear, and coherent.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Questions and discussion were encouraged.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Audiovisual materials were helpful and facilitated understanding.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Presenters spoke clearly and at an appropriate level for the audience.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will apply what I have learned.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I would recommend this presentation to my colleagues.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

What could be changed/added to improve your rating of this presentation?

______________________________________________________________________________
______________________________________________________________________________

What were the strengths of this presentation?

______________________________________________________________________________
______________________________________________________________________________

Will the information learned from this presentation influence your day-to-day work? Please explain.

______________________________________________________________________________
______________________________________________________________________________

Please list your current profession.

________________________________________________________________________
FAMILY INFORMATION LETTER

Description of the evaluation and your participation:

Keystone Child, Youth & Family Services is conducting an evaluation of the Grey Bruce Multidisciplinary Eating Disorder Program. The purpose of the evaluation is to assess the effectiveness of the Grey Bruce Multidisciplinary Eating Disorder Program to determine if it is meeting the needs of children/youth and their families experiencing eating disorders in their rural local area.

As a family participating in the Grey Bruce Multidisciplinary Eating Disorder Program, we would like invite you to participate in the evaluation study. Your participation will involve the completion of clinical questionnaires and assessment scores at the beginning of the program, throughout treatment, and at the end of your involvement with the program. In some instances you have already completed these questionnaires as a part of your assessment and treatment, and therefore we are seeking your consent to use data from your questionnaires for this project. If you choose to participate, your case manager/counsellor will facilitate the completion of these questionnaires/scores. The amount of time required for your participation will be minimal.

We will use the information from the evaluation to determine whether the Grey Bruce Multidisciplinary Eating Disorder Program is helpful in addressing the problems relating to the eating disorder.

Confidentiality

All the information that you provide will be kept confidential. Your information will be assigned a code and your name will not be used in the evaluation. The list connecting your name to this code will be kept in a locked file, and when the evaluation is completed, the list will be destroyed. Your name and any personal identifying information will not be used in any report.

Voluntary Participation

Your participation in this evaluation is voluntary. You may choose not to participate or you may withdraw from the evaluation at any time. You will not be penalized in any way if you decide not to participate in this evaluation or choose to withdraw at a later date. There are no benefits to you that would result from your participation in this evaluation; however, your information will help us understand some of the ways that the program can be improved for others.

Contact Information

If you have any questions or concerns about this evaluation or if any problems arise, please speak to your case manager/counsellor or contact Melissa Chalmers at (519) 371-4773 ext 115.
CONSENT FORM

Keystone Child, Youth & Family Services is conducting an evaluation of the Grey Bruce Multidisciplinary Eating Disorder Program. The purpose of the evaluation is to assess the effectiveness of the Grey Bruce Multidisciplinary Eating Disorder Program to determine if it is meeting the needs of children/youth and their families experiencing eating disorders in their rural local area.

As a family participating in the Grey Bruce Multidisciplinary Eating Disorder Program, we would like invite you to participate in the evaluation study. Your participation will involve the completion of clinical questionnaires and assessment scores at the beginning of the program, throughout treatment, and at the end of your involvement with the program. In some instances you have already completed these questionnaires as a part of your assessment and treatment, and therefore we are seeking your consent to use data from your questionnaires for this project. If you choose to participate, your case manager/counsellor will facilitate the completion of these questionnaires/scores. The amount of time required for your participation will be minimal.

Confidentiality

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Voluntary Participation

Your participation in this evaluation is voluntary. You may choose not to participate or you may withdraw from the evaluation at any time. You will not be penalized in any way if you decide not to participate in this evaluation or choose to withdraw at a later date. There are no benefits to you that would result from your participation in this evaluation; however, your information will help us understand some of the ways that the program can be improved for others.

Contact Information

If you have any questions or concerns about this evaluation or if any problems arise, please speak to your case manager/counsellor or contact Melissa Chalmers at (519) 371-4773 ext 115.

Consent

I have read the above information regarding my participation in the evaluation of the Grey Bruce Multidisciplinary Eating Disorder Program and have been given the opportunity to ask questions. I give my consent to participate in this evaluation.

Parent Signature: ____________________________ Date: ____________
Parent Signature: ____________________________ Date: ____________
Client Signature: ____________________________ Date: ____________

Please keep the information portion of this consent form for your records and return the consent portion to your case manager/counsellor.
### Table 2.1: Summary of Demographic Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>15 (93.8)</td>
</tr>
<tr>
<td>Male</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>13</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>14</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>15</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>16</td>
<td>4 (25)</td>
</tr>
<tr>
<td>17</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Parents Marital Status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>11 (68.8)</td>
</tr>
<tr>
<td>Separated</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>Parents Education (Intake caller)</td>
<td></td>
</tr>
<tr>
<td>Completed Secondary</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Some Community College</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Completed Community College</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Some University</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Completed University</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Missing</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
</tr>
<tr>
<td>$0-9,999</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>$10,000-19,999</td>
<td>0 (0)</td>
</tr>
<tr>
<td>$20,000-29,999</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>$30,000-39,999</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>$40,000-49,999</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>$50,000-59,999</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Greater than $60,000</td>
<td>7 (43.8)</td>
</tr>
<tr>
<td>Missing</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Child/Youth's Grade Average</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>8 (50)</td>
</tr>
<tr>
<td>B</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>C</td>
<td>0 (0)</td>
</tr>
<tr>
<td>D</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Missing</td>
<td>2 (12.5)</td>
</tr>
</tbody>
</table>

### Table 2.2: Summary of Clinical Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral Source</td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>8 (50)</td>
</tr>
<tr>
<td>Grey Bruce Health Services</td>
<td>4 (25)</td>
</tr>
<tr>
<td>London Health Sciences</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Family Physician</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Frequency of Counselling sessions</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>11 (68)</td>
</tr>
<tr>
<td>Bi-weekly</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td>Length of Service</td>
<td></td>
</tr>
<tr>
<td>0-6 months</td>
<td>4 (25)</td>
</tr>
<tr>
<td>7-12 months</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Over 1 year</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Over 2 years</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Still receiving service</td>
<td>9 (56.3)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
</tr>
<tr>
<td>Anorexia Nervosa-Restrictive Subtype</td>
<td>7 (43.8)</td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>Eating Disorder Not Otherwise Specified</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder with</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>disordered eating</td>
<td></td>
</tr>
<tr>
<td>Concurrent Mental Health Diagnosis</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>No</td>
<td>11 (68.8)</td>
</tr>
<tr>
<td>Received Inpatient treatment/location</td>
<td></td>
</tr>
<tr>
<td>Grey Bruce Health Services</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>London Health Science</td>
<td>3 (18.8)</td>
</tr>
<tr>
<td>No inpatient treatment needed</td>
<td>8 (50)</td>
</tr>
<tr>
<td>Length of Stay</td>
<td></td>
</tr>
<tr>
<td>1-7 days</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>8-14 days</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>22-29 days</td>
<td>1 (6.3)</td>
</tr>
<tr>
<td>30+ days</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>Use of Medication in treatment</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7 (43.8)</td>
</tr>
<tr>
<td>No</td>
<td>9 (56.3)</td>
</tr>
<tr>
<td>History of Suicidal Behaviour</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7 (43.8)</td>
</tr>
<tr>
<td>No</td>
<td>9 (56.3)</td>
</tr>
</tbody>
</table>
Appendix H: Figures

Figure 1: Members of Clinical Team

Figure 2: Mean BCFPI t-scores (population norms)
Figure 3: Participants According to Profession

- Educational Assistant: 24
- Other: 16
- Elementary Teacher: 9
- Secondary Teacher: 16
- Teacher Level not specified: 1
- Guidance Counsellor: 2
- Student Success Teacher: 1
- Child & Youth Worker: 1

n=83
Appendix I

Table 2.3: Means and Standard Deviation for Participants Outcome Measure Scores Pre/Post Presentation.

<table>
<thead>
<tr>
<th>Pair</th>
<th>Outcome Measure</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knowledge of eating disorders prior to presentation</td>
<td>2.3810</td>
<td>84</td>
<td>.83457</td>
<td>.09106</td>
</tr>
<tr>
<td></td>
<td>Knowledge of eating disorders following presentation</td>
<td>1.9286</td>
<td>84</td>
<td>.50980</td>
<td>.05562</td>
</tr>
<tr>
<td>2</td>
<td>View of eating disorders as a mental health issue prior to presentation</td>
<td>1.6429</td>
<td>84</td>
<td>.57336</td>
<td>.06256</td>
</tr>
<tr>
<td></td>
<td>View of eating disorders as a mental health issue following presentation</td>
<td>1.4762</td>
<td>84</td>
<td>.56985</td>
<td>.06218</td>
</tr>
<tr>
<td>3</td>
<td>Confidence in recognizing warning signs prior to presentation</td>
<td>2.3375</td>
<td>80</td>
<td>.94056</td>
<td>.10516</td>
</tr>
<tr>
<td></td>
<td>Confidence in recognizing warning signs following presentation</td>
<td>2.0625</td>
<td>80</td>
<td>.51173</td>
<td>.05721</td>
</tr>
<tr>
<td>4</td>
<td>Confidence in knowing how to respond to disordered eating concerns prior to presentation</td>
<td>2.6667</td>
<td>81</td>
<td>.86603</td>
<td>.09623</td>
</tr>
<tr>
<td></td>
<td>Confidence in knowing how to respond to disordered eating concerns following presentation</td>
<td>1.9753</td>
<td>81</td>
<td>.52382</td>
<td>.05820</td>
</tr>
<tr>
<td>5</td>
<td>Awareness of eating disorder services in Grey Bruce prior to presentation</td>
<td>2.7143</td>
<td>84</td>
<td>1.08185</td>
<td>.11804</td>
</tr>
<tr>
<td></td>
<td>Awareness of eating disorder services in Grey Bruce following presentation</td>
<td>1.5714</td>
<td>84</td>
<td>.49784</td>
<td>.05432</td>
</tr>
<tr>
<td>6</td>
<td>Knowledge of how to make a referral prior to presentation</td>
<td>2.7470</td>
<td>83</td>
<td>1.15657</td>
<td>.12695</td>
</tr>
<tr>
<td></td>
<td>Knowledge of how to make a referral following the presentation</td>
<td>1.6145</td>
<td>83</td>
<td>.60145</td>
<td>.06602</td>
</tr>
<tr>
<td>7</td>
<td>Knowledge of whom to call with questions or for additional information prior to the presentation</td>
<td>2.5904</td>
<td>83</td>
<td>1.01256</td>
<td>.11114</td>
</tr>
<tr>
<td></td>
<td>Knowledge of whom to call with questions or for additional information following the presentation</td>
<td>1.5301</td>
<td>83</td>
<td>.52585</td>
<td>.05772</td>
</tr>
</tbody>
</table>
Table 2.4: Paired Samples Test for Participants Outcome Measure Scores Pre/Post Presentation

<table>
<thead>
<tr>
<th>Pair</th>
<th>Outcome Measure</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Knowledge of eating disorders</td>
<td>.45238</td>
<td>.73476</td>
<td>.08017</td>
<td>.29293 to .61183</td>
<td>5.643</td>
<td>83</td>
<td>.000</td>
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<tr>
<td>Pair 2</td>
<td>View of eating disorders as a mental health issue</td>
<td>.16667</td>
<td>.65553</td>
<td>.07152</td>
<td>.02441 to .30893</td>
<td>2.330</td>
<td>83</td>
<td>.022</td>
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<td>Pair 3</td>
<td>Confidence in recognizing warning signs</td>
<td>.27500</td>
<td>.92743</td>
<td>.10369</td>
<td>.06861 to .48139</td>
<td>2.652</td>
<td>79</td>
<td>.010</td>
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<td>Pair 4</td>
<td>Confidence in knowing how to respond to disordered eating concerns</td>
<td>.69136</td>
<td>.99551</td>
<td>.11061</td>
<td>.47123 to .91148</td>
<td>6.250</td>
<td>80</td>
<td>.000</td>
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<tr>
<td>Pair 5</td>
<td>Awareness of eating disorder services in Grey Bruce</td>
<td>1.14286</td>
<td>1.14221</td>
<td>.12463</td>
<td>.89498 to 1.39073</td>
<td>9.170</td>
<td>83</td>
<td>.000</td>
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<td>Pair 6</td>
<td>Knowledge of how to make a referral</td>
<td>1.13253</td>
<td>1.28567</td>
<td>.14112</td>
<td>.85180 to 1.41326</td>
<td>8.025</td>
<td>82</td>
<td>.000</td>
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<td>Pair 7</td>
<td>Knowledge of who to call with questions or for additional information</td>
<td>1.06024</td>
<td>1.15134</td>
<td>.12638</td>
<td>.80884 to 1.31164</td>
<td>8.390</td>
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<td>.000</td>
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ACCOUNTING SUMMARY OF EXPENSES

<table>
<thead>
<tr>
<th>Eligible Budget Items</th>
<th>Approved Cost per Item ($)</th>
<th>Actual Cost per Item ($)</th>
<th>Total Cost ($)</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Project leads wages</td>
<td>10537.50</td>
<td>10537.50</td>
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<td>Software &amp; SPSS</td>
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<td>Administrative Costs</td>
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<td>1253.75</td>
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<tr>
<td>Exchange Activities</td>
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<td>695.71</td>
<td>695.71</td>
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</table>

|                       | $15045.00                  | $14486.96                |

Required Signatures:

_____________________________________
Executive Officer (Please Print)

______________________________________  ________________
Executive Officer (Signature)     Date

______________________________________  ________________
Witness (Signature)       Date