An Intervention-Planning and Outcome-Measurement System in the Service for Youth and Young Adults: Concept Development and Insights from the Experience – Stage II

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## Abstract

## Background

Israel's Ministry of Labor and Social Affairs (MOLSA), in cooperation with the Myers-JDC-Brookdale Institute (MJB), has been developing a process to establish and routinize outcome thinking<sup>1</sup> (OT) in all ministry units and auxiliaries. The procedure consists of developing supportive infrastructures and tools, including computerized data-management systems. At the level of frontline social workers, these systems help construct data-collection procedures, plan outcome-oriented intervention, monitor the implementation of interventions, and follow up on the extent of achievement of pre-defined results. At the managerial and head-office levels, they may help pool and present data in such a way as to reveal a full picture and implement policy driven by reliable, up-to-date data from the field.

The pilot to develop and integrate an intervention-planning (IP) and outcome-measurement (OM) system for the Service for Youth and Young Adults (YYA) was a groundbreaking endeavor serving as a case study and learning experience. The process, which began in 2012, consisted of two stages wherein some of the service units tested the experimental system, an archetypal data-management system supporting OT. The development process included ongoing dialogue with YYA social workers and directors, and an orderly procedure to examine the reactions to the system's trial use. Due to various constraints, the pilot was conducted with a dummy system using an MJB survey program. This report summarizes the two stages of the pilot, focusing mainly on the second, which included the development of a follow-up component for the implementation of the intervention, the measurement of outcomes, and updates to the intervention program.

## Goals

The pilot was subjected to numerous changes over the years. In its current form, it had three goals:

1. Developing the concept and presenting the possible contributions of an IP and OM system adapted to the YYA service and serving the frontline social workers and the levels of direct management and headquarters

<sup>&</sup>lt;sup>1</sup> "Outcome Thinking" (OT) in social services endeavors to achieve ongoing improvement of services and their outcomes through dataand information-based planning, systematic evaluation of outcome attainment, and sensitive utilization of data and information. OT includes a conceptual, perception-oriented and practical framework that unifies the planning, measurement and learning processes on all levels of reference.

- 2. Examining the feasibility of using the system, the reactions of social workers, and their attitudes to working according to the OT principles on which it is constructed
- 3. Obtaining initial information on the clients' characteristics and needs, the desirable outcomes defined, and the modes of intervention chosen by the social workers (this goal received emphasis mainly in Stage I)

## **Pilot Design**

The pilot was divided into two stages:

**Stage I** ( $t_o$ ) consisted of the collaborative development process for the system's IP components, its broad trial use, and the analysis and processing of the findings to illustrate future use of the data. This stage was predominantly quantitative, employing a comprehensive feedback questionnaire to examine how frontline social workers related to using the system.

**Stage II**  $(t_1)$  consisted of the development of follow-up components for the implementation of the planned intervention, the measurement of its outcomes by the system, and adjustments as required. To expand on the previous stage of the social workers' experience and attitudes, this stage tracked their trial use of these components, applying qualitative research methods by means of feedback from focus groups on the trial use of the system and an analysis of case studies.

## **Findings and Insights**

The pilot yielded valuable insights about the system components and the experience of using it. The quantitative data produced in Stage I made it possible to obtain a detailed, up-to-date picture of service clientele and the modes of intervention used with them; the picture conformed with the components of the Logic Model serves as a basis for formulating policy and developing services. Stage II permitted a more in-depth perspective of the social workers trial use and their attitudes to the overall experience of the system, subsequent to the data products from the Stage I questionnaire. The feedback obtained from the social workers in the two stages of the pilot revealed important insights as to the principles that should guide an IP OM system. Concomitantly, however, there was emphasis on the need to improve the technological and supportive organizational infrastructure. It was clear from the social workers and the needs of management while taking into account the built-in tension between the needs of the various levels. The social workers raised various issues that warrant consideration about the tool itself, the process of routinization, the ongoing work with the system, and the pilot process.

The pilot findings yielded numerous practical recommendations for the development of future systems. The recommendations and main programmatic directions address the critical importance of integrating the work theory and providing in-depth training in the use of the system as a preliminary process. In addition, the social workers emphasized the need to expand connectivity to parallel systems and ensure a user-friendly, synchronized technological interface, and to develop the praxis of client involvement in intervention planning. The feedback also yielded important suggestions for additions and changes to the tools. These are elaborated in the report and require in-depth discussion and decisions by the service administration.

# **Executive Summary**

## Background

For the past decade, Israel's Ministry of Labor and Social Affairs (MOLSA), in cooperation with the JDC-Myers-Brookdale Institute (MJB), has been promoting processes to establish and routinize outcome thinking (OT) in all ministry units. OT is a general designation for a range of norms and mechanisms encouraging ongoing endeavors to achieve results in social services. It includes data- and information-based planning to achieve outcomes, systematic evaluation of the extent of their achievement, and prudent, sensitive utilization of the collected data as a basis for ongoing learning and the improvement of work modes.

One key aspect of routinizing OT is the planning and integration of computerized support systems to assist both fieldworkers and head-office professionals. At the fieldwork level, the systems help with planning, monitoring the implementation of an intervention, evaluation and subsequent adjustments. At the level of head-office professionals, the systems help formulate policy by promoting learning processes based on a broad view of the data and pooling the wealth of data obtained from the comprehensive, computerized database. A system that is constructed so as to relate to both head-office needs and day-to-day use in the field may well serve both levels and indeed strengthen their interface. Consequently, a decision was made to develop the infrastructure of an IP and OM computerized system, on a trial basis, for an entire service; it would constitute an archetype of similar systems for additional services. The service chosen for purposes of the study was the Service for Youth and Young Adults (YYA).

The process to develop a system for YYA, which began in 2012, included a two-stage pilot with some of the service units trying out the experimental system. Despite the initial intention to develop a system of OM on a computerized MOLSA platform, for various reasons the pilot was ultimately conducted on the basis of a dummy system, by means of an MJB survey program. This document summarizes the two stages of the pilot, focusing on the second. The latter included the development of a component to follow the implementation of the intervention, measure its outcomes, and adjust the intervention program accordingly. The purpose of this document is to present the insights emerging from the pilot and illustrate the system's possible uses for YYA and other social services.

## **Pilot Design and Goals**

#### The updated version of the pilot had several goals:

- 1. To develop the concept and present the possible contributions of an IP and OM system adapted to the YYA service and serving the frontline social workers and the levels of direct management and headquarters
- 2. To examine the feasibility of using the system, the reactions of the social workers, and their attitudes to working according to the OT principles on which it is constructed
- 3. To obtain initial information on the clients' characteristics and needs, the desired outcomes, and the modes of intervention chosen by the social workers (this goal was secondary, it was emphasized mainly in Stage I, which was predominantly quantitative).

#### Pilot Design – Two Stages

**Stage I** ( $t_0$ ) consisted of the collaborative development process of IP components in the overall system, broad trial use of it, and analysis and processing of the findings from this operation in order to illustrate future uses of the data. The accompanying study employed a comprehensive feedback questionnaire to examine the attitudes of frontline social workers to using the system.

**Stage II**  $(t_1)$  consisted of the development of follow-up components for the implementation of the planned intervention, the measurement of its outcomes in the system, and adjustments to the intervention as required. In addition, it followed the social workers' experience with these components. The main goal of Stage II was to gain a broader perspective of the social workers' experience and attitudes, gathering comments and insights about the overall experience with the trial system further to the data produced from the feedback questionnaire of Stage I. For this reason, qualitative research methods were chosen. The data were collected by means of feedback from focus groups and the analysis of case studies.

## **System Principles**

Two main principles guided the construction of the IP OM system:

1. The establishment of infrastructure to support routinization according to OT principles – systematic, reasoned planning, follow-up of the implementation of the intervention and of the outcomes, for the various levels to use the data judiciously. Thus, the system includes:

- □ Work adaptations according to the logic model<sup>2</sup> in its use as an intervention-planning tool
- **D** The need for substantiation at junctures requiring discretion and decision-making
- □ The capability of measuring outcomes at the field and head-office levels and of monitoring the implementation of an intervention
- Planning intervention in partnership with the client
- 2. Maximal adaptation to the social-service arena and the various needs of the field and headquarters; thus, the system includes:
  - The collection of data presented in different ways quantitative and categorized, alongside narrative and holistic
  - □ The alternative of choosing "other" as a response to closed questions, with the possibility of elaboration
  - Recognition of the possibility of partial and missing information
  - Feasibility, and facilitating the social workers' work

## The Structure of the System

The system consists of three parts – the first two were developed and examined in Stage I, the third – in Stage II:

- 1. Assessment: collecting information on a client's characteristics; needs and problems; strengths and resources at her/his disposal; and on the history of intervention with the client and family
- 2. IP: defining desirable outcomes; defining the indicators attesting to the achievement of the desired outcomes; choosing intervention strategies and frameworks to achieve and substantiate the choices that were made
- 3. Follow-up of the implementation of the intervention and the achievement of outcomes, including an update of the characteristics and needs of the youth and adjustment of the intervention program

Another component was the self-completion questionnaire administered in Stage I, in which clients assessed their situation vis-à-vis the various areas of need, and related to their preferences regarding the areas on which the intervention focused.

<sup>&</sup>lt;sup>2</sup> The logic model is a work tool that presents in graphic form specific, key components of an intervention program: characteristics, needs, inputs, activities and outcomes, and demonstrates their interconnection. It is thus a quasi-road map clarifying the technique of the expected activity.

## Findings:

In Stage I, the quantitative and qualitative data obtained presented highly valuable information on the characteristics of the service clientele, their main needs, and the relationships of such characteristics as age and sector to the areas and/or expressions of needs. The findings also revealed the social workers' decision-making patterns, as well as considerations and the reasons for their choice of frameworks and intervention strategies. The focus at this stage was the feedback from 50 social workers who had tried out the IP OM system. Most were positive about its integration, noting that such a system could contribute to their work. Many indeed supported the OT principles, believing them to be consistent with the professional principles of social work. There was, however, a gap between the voiced support in principle of a system of this kind and criticism of the performance of the dummy system developed for purposes of the pilot. The findings from the feedback stress the need to develop technological infrastructure and prepare organizationally as a condition of advancing the use of this type of system.

Stage II of the pilot included measures to gain a deeper understanding of the social workers reactions and attitudes to the system and OT principles, using qualitative research methods. After trying out the system and completing the questionnaires, group interviews were conducted with 21 social workers. Insofar as concerns their feedback, the findings of Stage II are largely congruent with those of Stage I and corroborative, providing elaboration and a deeper understanding.

#### OT as perceived by the social workers: Principles and Implementation

- Social workers attitudes to OT. In the whole, the social workers reactions to OT were positive. Most said they were ready and willing for their work in the service to be more planned, documented, reasoned and evaluated, claiming that this change might focus the intervention process and assist with follow-up, including of the outcomes. They also said they recognized the importance of documentation at the head-office and organizational levels in order to formulate policy, develop responses, and broaden the ability of frontline social workers to influence these processes. Nevertheless, some pointed to the difficulty of actually using the ideas of OT since, to date, they had become accustomed to a different way of thinking, more suitable to the conditions of their everyday work. Furthermore, some found it difficult to understand the connection between OT work principles and the structure and sequence of the questionnaire. These findings lend added importance to the theory's implementation and preliminary training processes.
- Social workers reactions to computerizing the systems. The social workers were positive about implementing the principles in their ongoing work by using the computerized system, regarding it as a

potentially helpful tool. However, they were apprehensive that an imbalance might be created between the administrative work and documentation for the system and their interpersonal relations with clients, which they perceive as the core of their professional work. They also expressed the belief that for the system to serve their needs in the best possible way, in-depth training was required at the operative level, as well as a closer connection with parallel systems and the provision of a technologically-friendly interface to support ongoing work processes.

#### Use of the Tool

- **Tool characteristics.** The social workers reactions to the questionnaire were ambivalent; there was a palpable gap between their positive attitude to the theoretical, conceptual aspect of OT and their reservations and misgivings about the implemental and technical aspect of the process and the effort it involved. The negative aspects related to various characteristics of the tool such as its length, level of elaboration, and missing elements required for their ongoing work. In addition, the social workers received case summaries based on the information they had supplied on the questionnaire in Stage I to help them assess the intervention up to that point and complete the Stage II questionnaire. They reported that the information produced by the system was highly valuable at the level of praxis, noting that it could contribute considerably in ongoing professional uses. It is essential to understand the social workers' experience as the main users of the system, and take it into account in planning the final system.
- **Issues relating to the tool and the system.** The planning of the system took into account that it was to address the needs of the staff at various levels and positions. Nonetheless, there is a built-in tension between the needs of the different levels. In general, frontline social workers need a system that can assist them plan and perform their ongoing work with clients, whereas the head-office level need a system that can assist them with supervision, organizational learning, the development of knowledge, and support for administrative decisions. The frontline social workers raised a number of issues that illustrated how this tension came to the fore: local adaptation versus uniformity, structure versus flexibility regarding the questionnaire, categorization versus holism and so forth. These issues must be addressed by YYA's management; to a large extent, they will define the level of detail of the information to be entered into the system, its scope, and the way that it should be documented, organized and used at the aggregate level.

#### The Process of Integration and Ongoing Work with the System

The social workers also raised a number of issues about their ongoing work with the system and how it could support their work on a daily basis. Clearly, they regarded the system not only as a platform for documenting and organizing data to benefit planning processes, monitoring and evaluation. They saw it, too, as a tool to improve the working interface within the organization and between it and other systems inside and outside of the community. Despite their positive assessment of the tool's usefulness, they raised various questions about its applicability: in cases where the intervention was not very intensive; regarding the timing and frequency of completing the follow-up questionnaire, and how relevant the self-reporting questionnaires were. Other issues related to the interfaces inside and outside of the organization; for example, identifying the party responsible for evaluating the intervention and documenting the data in the system when several treatment parties were involved, and the need to synchronize the system with computerized systems in additional MOLSA services for purposes of uniform treatment and the convenient, efficient transfer of information. The social workers feel that it is decisive to develop procedures and work theories for the systemic aspects of the process of integration and the ongoing work with the system.

#### **Social Workers Reactions to the Pilot Process**

While the social workers voiced appreciation of the collaborative process of constructing and integrating the system, there were also reservations about the development process and the management of the pilot. Some felt that the system had been planned primarily from the standpoint of head-office rather than field needs. They said that the development process had been carried out without sufficiently consulting the frontline social workers or examining their needs, and the pilot had not sufficiently emphasized substantial training in OT principles and components near the time of questionnaire completion. Moreover, parallel to the two stages of the pilot, there had been various processes on the local and national levels of integrating other computerized systems, which created unusual overload for the workers and they were thus not entirely available for learning and active participation.

#### **Findings from Case Studies**

Insights from questionnaires and case studies. The case studies showed that the social workers used the system seriously and attentively, and the reasons for their choice of intervention were well defined and in the spirit of OT. The answers supplied in Stage I and Stage II were evidently linked regarding the needs and desirable outcome areas for an intervention, and the main reasons given for choosing those outcomes. Furthermore, the case studies yielded a good deal of data with respect to missing questions, the use of openended questions, response alternatives and so on, that could enhance the tool's improvement and precision. Close examination of the dummy system showed that in its present state, there are still inadequacies although these are technical rather than substantive and can be corrected in the construction of a future system. The

summary component, if constructed optimally, would certainly constitute a central component of system use, serving the social workers as an auxiliary tool in training, in committees and in cases of staff turnover.

• Examining the answers at the aggregate level. The social workers' answers were examined at the aggregate level for every clause of the questionnaire. At this stage, since the sample was not representative to begin with, the data could not produce generalizations about the clients' situation in the service as a whole. The data could merely provide a picture, in principle, of the type of data that can be produced at the level of the service, the unit or district, and the individual client. If all service units absorb this type of system in the future, a full picture of the situation will be possible.

# Main Insights for Retention and Improvement that Emerged from the Pilot

The development and examination of the IP OM system at MOLSA's YYA service is an ongoing project extending over several years. It is unique and important in that it is an archetype for the development of similar systems in the future whether for this service or another, or for other MOLSA units. The findings of the pilot may be summarized as follows:

- 1. The model is applicable
- 2. The system answers to the needs of the different levels
- 3. The technological and supportive organizational infrastructures require improvement
- 4. There is a need for interface and synchronization with parallel systems
- 5. The system supports social workers decision-making processes in the spirit of OT

#### **Possible Contributions to the Service**

The thinking behind the system planning was that it should serve staff at various levels, from head-office to frontline social workers. According to the pilot findings, such a system can support ongoing praxis, assisting staff at both the level of individual intervention and the system-wide level.

#### **Contributions to Headquarters and Policymakers**

The system's benefit to the service head-office and the ministry is that it offers a broad picture based on the pooling of quantitative data on the clients and the interventions addressing them. This picture can help chart judicious policy in the development of suitable interventions and the proper allocation of resources. The data can

be produced in the form of reports, according to varied segmentations. One method of pooling and presenting the data is known as the "dashboard," which provides an up-to-date picture from the system data of the clients applying to the service, for the use of managers and policymakers.

#### **Contributions to Frontline Social Workers**

The system structures work according to the components of the logic model, facilitating systematic, reasoned and documented planning. Frontline social workers can benefit from the system at all stages of an intervention: planning, monitoring and follow-up of implementation, follow-up of outcome achievement, and adjustments to the program. The summary report derived from the system assists in the ongoing work with additional stakeholders both inside and outside of the organization. Similarly, the system provides a response to the organizational needs of different positions and different levels:

- Social workers Transfer of information to new employees in the case of turnover, peer learning and such formal needs as preparations for committees
- **Direct supervisor** / **instructor** Direct supervision, follow-up on defined aims and goals, and on the intervention, for more efficient and precise work processes
- Inspectors External inspection and control, learning from the field, and enriching the body of professional knowledge

#### **Recommendations and Main Programmatic Directions**

**General recommendations.** The pilot collected data to highlight key issues and demonstrate possible uses of the information. The development of a future system would do well to draw on the insights and lessons derived from the current experience. For example, efforts should be made to develop and integrate a generic computerized system with a uniform interface, to include different modules adapted to various types of population, and promote an orderly, uninterrupted transfer of information. Similarly, attempts should be made to coordinate processes and connect to parallel systems around training, integration and development processes. The questionnaire content should be divided to correspond to the axes of problem areas appearing in the existing division of the "list of needs," and it would be wise to ensure that uniform measures are formulated for the organizations engaged with youth and young people.

**Recommendations related to the tool and the system.** Following the pilot, additions and modifications to the system were suggested, for example: the possibility to make local adjustments based on the needs of specific

localities; the integration of additional components necessary to intervention management, such as administrative forms and contact information; authorizations for other systems that interact with the service; the addition of the option "unknown" as a possible answer in the case of missing or partial information for items deemed unnecessary at the discretion of the service; shortening and focusing the tool, for instance, by adding more screening questions and passages that may be skipped; creating a convenient, efficient interface for completion of the questionnaire itself and summaries in the client file. Furthermore, a decision is required about the language of the tool and the need for translation. In parallel, close, broader training should be considered for social workers having difficulty with Hebrew and speaking other languages.

**Recommendations related to the process of integrating the system.** The system's integration should be accompanied by the assimilation of its theoretical and professional conception, and by the provision of definitions and terms relevant to OT principles. It is important to ensure that the collaborative process receive more visibility, and it is recommended to share with the social workers as much as possible the findings of the pilot and their contribution to the system. It is important to accompany the tool's integration and utilization with a detailed and in-depth training processes. Moreover, an orderly, structured integration procedure should be planned, with guidelines, timeframes, and defined responsibilities to avoid ambiguity and reduce uncertainty. Technological support must be ensured and feedback processes should be ongoing even after the system's initial introduction, in order to improve the tool and hone its formulations to suit both the changing needs of the service and the learning based on social workers insights in their continuous use of the system.

**Recommendations related to ongoing work.** The pilot raised various questions for consideration by the service, for example: how to follow up on youth who are not part of the Service's internal frameworks or are in the care of several agencies simultaneously; deciding on the case manager's role and responsibilities and providing clear guidelines for the completion of the questionnaire and the orderly transfer of information to various parties; the timing and frequency of questionnaire completion – at pre-set intervals versus case-dependent; the possibility of ongoing system data updates along with briefer periods between follow-up, and accessible, practical task management as a supplementary means to in-depth questionnaire completion. In addition, the need arose for a preliminary screening tool to include a general assessment; this would decide whether to perform a detailed assessment and expand the diagnosis. Furthermore, the principle of involvement in planning an intervention should be farther developed; how best to encourage their greater involvement and permit their voices to be heard.

**Recommendations related to the course of the pilot**. It is recommended that future pilots be undertaken only if the specific computerized infrastructure is in place and that non-specific programs or temporary solutions be

avoided as they lead to mishaps and affect the experience of the users, the extent of information obtained and its quality. Moreover, the aspiration should be to achieve coordination with similar, simultaneous ministry-wide processes. Steps should be taken to encourage the cooperation of various parties at the service, to recruit the social workers to work according to OT and use the system, stressing its benefit for them. Due to the need to see how the social work praxis actually proceeds, another element should be added to this type of pilot, to include observations and a preliminary pre-test in a limited format before the implementation of the broad pilot. Here, the emphasis should be on personal training and face-to-face feedback. Finally, the time frame between the two stages of the pilot should be relatively short.