

## ORIGINAL ARTICLE

# Implementing the Addiction Severity Index (ASI) in Swedish human services sectors: Experiences, problems and prospects

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## Abstract

In Sweden, agencies within both the health services and the social services sectors are responsible for treatment, rehabilitation and care of persons with substance-abuse problems. Also in the prison and probation system such problems are common among clients. The article describes how a Swedish version of the Addiction Severity Index (ASI) was developed and introduced in these three systems in the late 1990s and the extent of its implementation in regular practice. The ASI is now used for treatment-planning and outcome-evaluation purposes and not only for research purposes in Swedish substance-abuse treatment agencies. A comparison of the implementation of the ASI in the three human services sectors indicates that the top-down implementation strategies used in the prison and probation system have some important benefits, when compared with bottom-up strategies, although such strategies are more conducive to dissemination in more decentralized human services systems. But several implementation barriers are common in all three services sectors—for example, high levels of staff turnover and competition with other structured assessment instruments. It is concluded that the prospects for a more widespread use of the ASI in the future depends—in all three human services sectors—both on the external demands for effectiveness and transparency and on internal, particularly managerial, commitment to effective services and evidence-based practice.

**Keywords:** *Addiction Severity Index (ASI), need assessment (instrument), implementation*

## Background

The responsibility for treatment, rehabilitation and care of persons with substance-abuse problems is formally divided between the health and the social services systems in Sweden, with the social services in a prominent role, in particular financially. At present,

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the Addiction Severity Index (ASI) interview is advocated and implemented as a component in regular practice for care and treatment of persons with substance-abuse problems in social services and in health services in Sweden. A special version is also being implemented on a large scale in the prison and probation system.

The ASI interview found its way into Sweden through researchers related to the health services (Andréasson et al., 1996). Its dissemination into regular practice in the three human services sectors, towards the end of the 1990s, can at least be partly linked to the demand from external stakeholders for more effective human services and the quest for increased transparency of their function. For the social services, legislative changes took place in the mid-1990s, requesting that services were of good quality and calling upon evaluation and quality assurance practices (Tengvald, Bergström, & Sterky, 1999). The Swedish National Audit Office (RRV) and the National Council for Crime Prevention (BRÅ) also increasingly demanded that the prison and probation system developed evidence-based treatment planning and documentation (Martens & Brorsson, 1998).

After a presentation of the development of a Swedish-language version of the ASI and efforts to provide support for its implementation, this paper discusses some notable differences in these implementation processes.

### **The introductory stage—A Swedish-language version of the ASI**

In the early 1990s, the ASI had been introduced locally in health services substance-abuse treatment settings, and health-sector personnel had started to inform staff in prison and probation services about the value of structured assessment instruments (Bergman, 1996). Towards the end of the 1990s, the national management of the Prison and Probation Administration launched a strategy for the development of more evidence-based practice, called “what works”. This strategy has subsequently been filled with different components, related to such a development. The development of a national documentation system for treatment planning and follow-up, which could also function for quality assurance and research purposes, is an important component, and here the decision fell upon the ASI.

As regards the social services, the development of the DOK-system (Jenner & Segraeus, 1997) was an early initiative to introduce standardized need assessment instruments in substance-abuse treatment settings. DOK has now developed into a computerized client documentation system, extensively used by the National Board of Institutional Care (SiS)—a national social service provider of compulsory residential care for substance abusers. It is also used in other residential settings. When SiS was established, DOK was the only more comprehensive, structured client-assessment instrument in the Swedish language.

The Centre for Evaluation of Social Services (CUS), established in 1993 at the Swedish National Board of Health and Welfare, became a national actor, supporting the development of more systematic empirical knowledge on social service outcome and effectiveness in the social services generally. The CUS decided to initiate an “official” Swedish-language version of the ASI in 1995. The decision was preceded by quite some discussion in the CUS expert group on substance-abuse treatment. Both ethical and practical problems were foreseen, many of which are still with us (Berglund et al., 1996).

The positive stance taken, concerning the ASI as a potential systematic assessment

“instrument” for regular practice in social services substance-abuse treatment settings, was mainly based on four aspects.

- ASI had already undergone extensive scientific validation.
- Its comprehensive nature, covering different spheres and aspects of life beyond substance abuse, is in accordance with present knowledge on important factors to consider during the treatment-planning process.
- Its comprehensive nature is furthermore in general accordance with the very broad objectives to improve well-being, security and an active and independent social life, stated in the Swedish social services legislation. Improvement in family relations, employment, etc. is thus also aspired outcomes for the social services.
- The client’s own assessment of his/her situation and problems was a systematic element in the interview.

The CUS formed an expert group in 1995, headed by professor Hans Bergman, the Karolinska Institute and including psychometric expertise and members from the two research teams who had developed earlier versions. The aim was to develop a single Swedish-language version, based on the fifth McLellan (i.e. US) version (McLellan et al., 1992). The Swedish version was tested on several categories of social services clients and health services patients in both institutional and non-institutional settings, with a psychometrically acceptable outcome. The first official Swedish language version was published in 1996 (Andréasson et al.). It included the initial and follow-up ASI interviews, the manual and the test results. [1]

SiS participation in an international clinical research project (IPTRP/Biomed2; Kaplan, Broekaert, & Morival, 2001), where the EuropASI version was used, prompted a revision of the Swedish version for compatibility with EuropASI (Andréasson et al., 1999). Also from this project, both the ASI-Feedback Form (AFF; Öberg, Sallmén, Kaplan, & Yates, 1998a; Öberg & Sallmén, 1999), enhancing clinical applicability of the instrument, and the Monitoring Area and Phase System (MAPS; Öberg, Gerdner, Sallmén, Jansson, & Segraeus, 1998b) emanated. Still, ASI was not regarded as sufficiently compatible with the needs of the Swedish Prison and Probation Administration. A cross-cultural working group has developed a complementary module to the ASI—ASI-Crime (Sallmén, Öberg, Krantz, & Kaplan, in preparation)—addressing the dimensions that were highlighted in available criminogenic instruments. The ASI version now being implemented within the prison and probation system (ASI-X; Öberg, Zingmark, & Sallmén, 1999) is an expanded version of EuropASI supplemented by questions adapted from the ASI-F (Friedman & Brown 1997) and ASI-X and by MAPS (Öberg et al., 1998). The version is called ASI/MAPS. [2]

The initial aspirations were to develop one official Swedish-language version of the ASI, but we now have two slightly different versions. Furthermore, the first version was altered already after 3 years. In spite of good reasons, this is not an ideal situation for the implementation of the ASI into regular practice and causes some insecurity in inter-sector professional encounters and maybe also for clients. [3]

### **Developing a support system for the use of the ASI in regular practice**

Apart from the dissemination on request of the ASI interview and manual and giving information about training, very little active effort was made to support its implementation [4]

in practice during the first years. In spite of this, approximately a thousand persons had taken part in the 2–3-day ASI-training programme, between 1996 and 2000, many of them from the social services sector. There was evidently an increasing interest and acceptance of structured interviews; but most practitioners made just a few interviews and, even though they had a positive opinion about the ASI, this had little impact on their colleagues. Many also ceased using the ASI after some time (Engström & Nyström, 2002).

The step from an existing Swedish language version of ASI to its more than occasional use in regular practice is of course huge (see Hudson, 1996). The ASI has a potential as a useful instrument for client/patient need assessment and follow-up. The client information documented in local services could, if aggregated, inform about the client mix, the outcomes produced, be used for benchmarking purposes, etc. This potential would certainly not be achieved unless, first, the ASI interview and training programme was “packaged” in a way that made its potential more easily accessible and, second, the local agencies were actually realizing its potential and needing the information the ASI could provide. More active and strategic implementation support was needed. Therefore, the CUS started a new ASI project in 1999, now led by Siv Nyström. This implementation support project has developed along several lines.

#### *Securing coordination across sectors and increasing commitment at the national level*

The ASI expert group was reconstructed to include representatives from all three sectors as well as scientific expertise in order to secure cross-sector communication and coordination. Executive personnel from the Prison and Probation Administration and the National Board of Health and Welfare programme for care of substance-abuse problems were added to the group, which has increased integration and commitment also within the National Board of Health and Welfare and slightly improved funding.

#### *Coordinating ASI training and securing training programme quality and uniformity*

A sub-group on education and implementation support was also constituted, consisting of persons “accredited” to give the ASI training programme. The educators have shared and coordinated training materials, views on interpretation of the questionnaire and manual, etc. and developed principles for the “accreditation” of new educators. The introduction of the ASI/MAPS version in the prison and probation system and the quickly expanding need for training its personnel to perform ASI interviews, make the efforts to keep a fair amount of uniformity in the training programme increasingly important.

#### *Developing a computer version and a handbook on processing and use of ASI information*

A computer version was developed in collaboration with personnel at the SiS. The computer version has been available for only 2 years. The present version includes a small statistical package with safeguards against statistical misinterpretations for users with limited statistical experience. More important for the present use of ASI is the recently developed option to get the interview in the form of a full-text narrative report. This makes the use of ASI more compatible with traditional need assessment documentation, particularly in the social services. It also works as a basis for feedback to clients and has proven valuable in communication with external authorities.

*Disseminating information on ASI and its use*

Up to 2001 and mainly for resource reasons, the dissemination of information on ASI has relied only on written material and on the training programme. An ASI website has existed since 1999 and been continually upgraded with information, relevant to different purposes of ASI use and to different categories of users. The site has become one of the most utilized and downloaded at the National Board's social services division.

However, ample evidence from marketing, dissemination and implementation experience shows that this is insufficient. For instance, research and experience of organizational change consistently point to the crucial role a committed management plays for a positive result (see Tengvald et al., 1999). Although the ASI expert group is well aware of this, the issue has not yet been appropriately addressed, partly owing to the limited mandate for the CUS and the ASI group, lacking executive responsibility and, therefore, acting more on demand. But demand, whether for information or different forms of support, rarely comes from the managerial level, at least not in the social services. Funding limitations have also been important.

Efforts to implement the ASI within the prison and probation system have been moving ahead in parallel. ASI/MAPS had gained considerable support from top management within the authority. In 1999, an extensive pilot study of ASI/MAPS was initiated nationally in the Prison and Probation Administration, including approximately 20 regional centres and led by Björn Sallmén and David Öberg.

**Implementation so far—What has been achieved?***The social services sector*

Based on simple surveys (Jergeby, 2001), we find occasional professional users of the ASI interview in direct clinical work, substance-abuse-treatment settings in around 25% of Sweden's 280 municipalities. In very few municipalities, however (around 5–10) is the ASI regularly used. The multi-purpose potential of the ASI is thus generally speaking far from realization yet in regular practice in the social services.

*The health services sector*

The structured character of the ASI interview was more readily accepted in the healthcare system than in the social services sector. ASI is now used on a fairly regular basis in two out of 20 counties/regions (Stockholm and Örebro) and often in special projects also in other counties. However, a wide variety of structured assessment instruments have long been available to the health services, and the ASI is only one of many. Since many local health service agencies for substance-abuse problems collaborate directly with the social services, sometimes actually as a combined agency, the comprehensive interview content has made ASI an assessment tool for social workers in these health services settings.

*The prison and probation sector*

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The implementation or rather launching of ASI/MAPS in the Prison and Probation Administration stands in stark contrast to the processes so far in health and social services, although it is still only in its very first stages. In the year 2001, top management decided

on its stepwise introduction. When fully integrated into local practice in 2005, it will provide approximately 15,000 interviews per year nationally. Currently, almost 500 officers and social workers have been trained. Educators have been trained with the ambition to be self-supporting by 2003. A regional structure for future support of the local organizations has been initiated. The computerized system for ASI/MAPS is currently implemented and will be fully operational in 2003, which will facilitate future implementation.

In conclusion implementation of ASI in regular practice in the three human service sectors is still at an early stage. It is evident, however, that a shift towards a three-sector utilisation in regular practice has been added to the research-based health services-oriented use.

### **Cross-sector comparisons of the implementation processes—Problems and prospects**

Both similarities and differences can be discerned in the implementation processes now taking place within the care and treatment units for persons with substance-abuse problems in the health and social services sectors and for clients in the prison and probation administration. The top-down implementation strategy set in operation in the prison and probation system is very different from the bottom-up processes in both the health and social services sectors, but several problems encountered in practical implementation are similar in all sectors.

Among the similar practical problems recognized in all sectors are high levels of staff turnover, where the many small units are particularly vulnerable, lack of time to learn and implement new skills, and lack of competence to use the potential of structured need assessment instruments. The ASI is also at times competing with alternative assessment and follow-up tools.

#### *Differences in implementation are partly structurally conditioned*

The Swedish governmental system is a three-tier system. Apart from the national level it also includes a local level (280 municipalities) responsible for social services and a regional level (20 counties or regions) responsible for health services. The two local governmental levels are formally autonomous as regards provision of services, though guided by national legislation, since they are largely funded through local taxes. The Prison and Probation Administration, on the other hand, is a national organization, though with a regional and local distribution of units. It is funded by national taxes and provides services on a nationwide scale. The National Board of Health and Welfare, though seemingly equivalent to the Prison and Probation Administration, has only indirect power over provision of health and social services by its regulatory and supervisory mandate. The National Board of Institutional Care, providing the tiny fraction of compulsory institutional care and treatment in the substance-abuse field, is the only national care provider in health and social services with a similar organizational structure to the Prison and Probation Administration.

There are also structural differences in terms of size and complexity of objectives. The prison and probation system has a smaller and relatively speaking more homogenous target population than the health and social services sectors. Target groups for care and

treatment for substance-abuse problems are not very much larger, but most local health and social service agencies are not specialized to serve this group only. The considerable variation in municipal population size in particular—from around 10 to several hundred thousand—limit the options of specialization as well as resources for developmental activities.

The decision taken by the top management of the Prison and Probation Administration, to implement the ASI (i.e. ASI/MAPS) as the general basis for its nationwide computerized client information system is therefore no option in health and social services.

### *The importance of cultural environment and internal culture*

Demands from the general public and its political representatives for increased transparency and more evidence that the public human services sectors function well, are positive external forces affecting internal action towards more evidence-based practice in the human services. Structured need assessment and follow-up instruments are one of several components of strategic importance for a future development in such a direction. This is also being recognized politically, and a hitherto restrictive policy concerning registers with sensitive client information was revised in 2002 to allow databases and statistics of relevance for treatment in both the social services and the prison and probation system. External demands of cost-effective services of good quality now seem to converge, irrespective of what sector of human services we focus on.

The internal professional cultures differ however. In the health services in particular but also in the social services, we have a considerable amount of university-trained professionals and resources for academic research on evidence-based practice. Health-sector professionals, especially doctors, have long since accepted the general ideas underlying evidence-based practice. Social workers, however, largely do not embrace this general thinking but in many cases rather question it. Although under debate recently in Sweden (Månsson, 2000; Tengvald, 2001), social work researchers and practitioners are strongly influenced by interpretative scientific approaches, rejecting the smell of “positivism” or of “the medical model” (Månsson). As a consequence, more systematic empirical studies on practice outcomes and effectiveness are still extremely rare. Presently social workers are not trained to use structured interviews for need assessment and follow-up. In the prison and probation system on the other hand, university-trained professionals as well as academic research resources are at present very scarce and the management therefore needs—but is also free—to develop in-house training programmes.

### *A top-down strategy has important benefits*

The top-down implementation strategy, now used in the prison and probation system, is still in its early stages of implementation and its success cannot be assessed at present. Applied in the early phases of an implementation process, however, has several beneficial features. Top management’s commitment has elicited financial resources and enhanced the managerial responsibility for the implementation process. This has made it possible to organize in-house development and “packaging” of the ASI, including the creation of infra-structural support, to improve its compatibility and usefulness for the staff. The following elements are especially important in this early phase.

- Adapting the ASI to improve its relevance. The inclusion of the crime-module is an example of development work initiated in-house and yet performed with good scientific quality.
- Creating a large-scale training programme and sustaining its capacity, thereby limiting the effects of staff turnover.
- Developing a “whole” computerized client documentation system, compatible with the computer platform of the organization and a nationwide database on client needs and the outcomes of services. In order to be similarly “well packaged” for the social services, a computerized ASI version would need to be compatible with a wide variation of local systems for administrative client information or used as a separate module.
- Initiating a regional support structure for local ASI-users, funded nationally.

### *What are the prospects?*

The prospects for a more widespread use of the ASI in the social, and prison and probation sectors in the future depends both on the sustainability of the external demands for effectiveness and transparency and on internal commitment to effective services and evidence-based practice.

As regards the internal aspects, the Prison and Probation Administration has committed itself strongly to evidence-based practice. Its well-packaged implementation of the ASI is but one component here. The “what works” programme and the recent initiative to create an accreditation panel for evidence-based rehabilitation programmes are other important aspects.

In spite of its more limited scope of influence, the National Board of Health and Welfare has also recently increased its activities in support of evidence-based practice in the social services (Socialstyrelsen, 2000). Systematic need assessment instruments are an important part of its future plan to build a knowledge base in the social services. The authority is also in the process of stepping up its regulatory activities, issuing national practice guidelines, which would probably also include guidelines on systematic need assessment.

Concerning the development of professional practice, this indicates a policy shift. As opposed to the health-sector situation, practice innovations have largely been a matter for local initiatives in both the prison and probation system and in social services, though in many cases funded through national means. Local efforts are of course both valuable and necessary, but the basic idea of evidence-based practice makes it pertinent to use development strategies drawing on combined efforts from research and practice. The original development of the ASI is in itself an example of this type of practice development, and all three sectors are heavily capitalizing on the original research and development efforts resulting from the US and European ASI versions.

The two national authorities are, however, handling this new situation differently. The Prison and Probation Administration has invested considerable resources in in-house development to adapt ASI to its assessment needs, to its computerized client documentation systems and to other forms of a continuous, nationally supported infrastructure. The present policy of the National Board of Health and Welfare, although generally speaking recognizing the importance of more researched-based inputs into practice development, will rely on such activity from the universities, both as regards training and research, which mainly leaves issues of adaptation and “packaging” to the local level. Not only the differences in organizational structure and managerial



commitment but also the organization and capacity of professional training and research will affect the future implementation of ASI in Swedish human services practice.

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