

Integrating Technology for Improving Care and Support for Persons with Disabilities

Background:

Individuals with developmental disabilities and their families everywhere need information, resources, and support. In developed countries, these are often provided through residential and day care facilities, in developing countries, families take up the responsibilities.

Providing care and support to a person having a developmental disability, through specialized care providers or through families, is a challenging task. A developmental disability is a lifelong condition and unlike any other health condition, individuals with this kind of disabilities are often unable to communicate the details of their needs; and support is often provided to them by many different people and/or organizations, both at any one time and over the life span of the person. The challenges posed by multiple, disparate locations of various service providers, family involvement, staff turnover and other issues that are unique to this community further complicates care providing for people working within this sector. Furthermore, in many countries the professional support needs to comply with government requirements and regulations including privacy and security, extensive detailed documentation, training requirements for support staff and long-term retention of documents.

Sophisticated information and communications technologies can simplify this process considerably for the care givers, by automating much of it. These cutting edge technologies can also enable access to integrated information through internet from any location and improve coordination among different service provider units, while ensuring full security of information. Unfortunately,

developmental disabilities community so far has not applied information technology as effectively as have other areas of the society.

Recognizing the unique characteristics of the developmental disabilities sector, Therap has designed its state of the art online documentation and communications system. Housed in highly secure servers, Therap system includes applications that can be accessed through any computer having internet connectivity.

With the ultimate goal of reducing paper work to zero, Therap applications are designed to achieve 3 objectives:

- Improve the support and care for individuals with disabilities, with a special focus on developmental disabilities.
- Improve the efficiency and reduce the cost of operations.
- Manage compliance with government regulations.

Having successfully provided services to government and non-government agencies in over 30 states in USA, Therap is now extending its services in other continents, starting with the South Asian countries of Nepal and Bangladesh.

Before going into Therap's initiatives in detail, a brief introduction to the organization and the services is provided in the next section:

About Therap:

Therap Services, LLC. is a web-based service organization that provides an integrated solution for documentation and communication needs of those supporting persons with disabilities, especially developmental disabilities. It offers an easy and efficient alternative to the immense amount of paper work that is done manually by the care providers with a comprehensive set of Individual, Staff,

and Billing Support applications. The underlying integrated database allows a user to easily and quickly retrieve, sort, communicate and manipulate information.

Therap's suite of online applications are tailored to meet the specific needs of service providers, health professionals, and regulators working with people with developmental disabilities. As a global company, Therap's vision is to design best practice applications based on needs and requirements by developmental disabilities communities around the world.

Therap applications are used for demographic and disability related data management; for reporting injuries, sickness and other incidents; for tracking health status; for creating care plans for persons with disabilities and measuring progress and more. Therap offers digital log keeping and secure emailing, staff scheduling, calendar and staff training management system. Therap also takes care of the billing needs with its Billing and Attendance applications.

In Therap, all information is entered, processed, reviewed and updated online, in real time. Data is centrally stored and is immediately available from any computer with internet connectivity to all authorized users. Reports and summaries are produced within seconds, requiring minimal entry.

Therap system is built on a robust infrastructure of high-availability, high-reliability, state-of-the-art communications and information technology that ensures high productivity, and economy.

With an excellent global team of over 80 professionals, built on the core of the founders, Therap provides all necessary support and training as part of its services in addition to the application.

Therap's services in different countries:

Therap's global nature allows its team to study different needs and requirements of disabilities communities around the world. Therap uses the outcomes of its research to design 'Best Practice' applications. The flexible architecture of the Therap system enables it to be deployed in widely varied locations to meet diverse needs.

Capitalizing on this strength, Therap has been offering its service to countries as diverse as USA, Nepal and Bangladesh, and is in a continuous process of exploring needs in other countries as well.

Therap in USA:

Therap has been offering a variety of services to provider agencies, health professionals, family members, and regulators working within the development disabilities community in more than 30 states including New York, Florida, Texas, California and Washington. In all these states Therap has received excellent responses from its subscribers, ranging from small scale private organizations to the state governments. The State of Delaware mandated each and every care providers in the state to use Therap for reporting all Incidents, and has included Therap in their strategic plan for information services through 2011. Apart from that, Therap is currently involved in various stages of discussions with a number of other states on a number of topics, for example a trial on secure individual contract information exchange with providers. Case managers in a number of states are accessing Therap to view secure information on Incidents and other aspects of individual support.

Therap in Asia:

Therap Services is currently working with governments and NGOs in Bangladesh and Nepal to explore uses of technology to bring together the best of these approaches into a single working system.

Bangladesh:

In collaboration with the Ministry of Social Welfare (MSW) of the Government of Bangladesh, Therap is currently implementing a pilot project to develop a national database on persons with disabilities. Two other major partners in this project are National Forum of Organizations Working with the Disabled (NFOWD) and National Foundation for Development of the Disabled Persons (NFDDP), which are major national organizations in the disability field. Together with Department of Social Services (DSS) under the MSW, these organizations and Therap are working on the database, which will be implemented in six districts of the country benefiting around two hundred thousand persons with disabilities as well as their families. Therap is providing the technical expertise and support required to build and maintain the database.

Some of the key features of this database include use of sophisticated biometric solutions to prevent data tampering, online storage of data, high data security and authorized accessibility from any location. To prevent data tampering this database software will use sophisticated fingerprint recognition technology for identification and verification of the data entered into the system. All the data will be stored in Therap's secure servers where it will be protected from unauthorized access and all sorts of natural and manmade disasters. The online storage also means the database can be accessed by authorized persons from any computer which is connected to the internet. This in effect means the policymakers as well as authorized officials of the government and non government bodies can view information and statistics from their computers with a few clicks.

Bangladesh has no comprehensive database on the persons with disabilities that is accepted by all. We still depend on the WHO estimate which says 10% of the total population, i.e. approximately 15 million people, has disabilities. But the exact figure is still unknown let alone other vital disability related information. In this context the importance of this project is unquestionable. Once implemented nationwide, the database will not only help identify the actual number of persons with disabilities in Bangladesh, it will also manage a vast amount of demographic and disability related data and generate a wide range of statistics. And all the data will be secure and available through disasters virtually from any place. A complete database on persons with disability will serve numerous purposes and it will help greatly at all levels – from policy making down to project implementation at grassroots level. This database will help to ensure transparency and accountability of the initiatives and increase efficiency in resource allocation, among its numerous other benefits.

Nepal:

With a view to understanding the Asian perspective as well as measure its usability in the Asian region that is very different from the west, Therap has brought its services to Nepal, where it is being used by the National Federation of the Disabled-Nepal (NFDN). NFDN is a national platform for Nepal's disability related organizations which has branches in 69 out of the 75 districts. The central office of the organization uses some of Therap's applications to keep track of their members and record activities.

Owing to its flexible nature, Therap system has proved to be useful to NFDN despite some serious obstacles – the major one being slow internet speed. A sophisticated system like Therap requires not fast but fairly good internet speed. The internet connection in Nepal, as in many other countries in this region, is slower than the speed standard in developed countries. As a result, data processing with Therap can be time consuming for the Nepali users. However, like other developing countries Nepal is also making gradual progress in this

regard and Therap expects that over the next few years internet speed will not be as much an issue as it is at present.

Along with the speed issue, the limited availability of internet is also a pressing concern. Apart from being slow, the Internet is available only in major cities; so it is currently not possible for the branches of NFDN in remotes areas to record and share information with the central office in Katmandu.

Other infrastructural problems internal to the user organization also factors in when using an automated system like Therap. These include insufficient technical resources i.e. computers and dedicated internet line. The same computer is used for all other tasks and the same line is used for phone, fax and internet which give staff less time to work with Therap. Lack of human resource to work on the system intensifies the problem. Put together, these setbacks offset the general advantages that an agency is supposed to gain while working on Therap. Yet the long term benefits are vast enough to attract NFDN to set aside the drawbacks and continue using it.

The barriers mentioned above, however, does not mean that Therap take no positive action but wait for the situation to improve. Agile as it is, the Therap team applies the learning from these setbacks to design lighter interfaces which will run smoother on slow internet connection. The applications now accommodate more optional features to address specific regional requirements, without making the interface cumbersome. And as an added benefit of having a strong customer support base, the company pays special attention to training and customer support making them more personalized. In providing support and training, Therap uses mechanisms best suited for regional users having less infrastructural facilities to further ease the difficulties. All these efforts seem to pay off – recommendation of NFDN has caused more organizations to express interest for trials. Therap is hopeful about its future in Nepal.

Conclusion:

Therap Services was founded on the basis that the developmental disabilities community could benefit significantly from applying our unique skills at building scalable, high availability, cost effective solutions. When we started, many of the user organizations did not have computers or high speed Internet access. Now these are becoming increasingly common and affordable, while other costs are rising. As we did 5 years ago, Therap is now designing its applications to take advantage of the next generations of technologies, for example portable Internet access and speech recognition.

Developmental disabilities is a global issue. WHO estimates that 600 million people have disabilities, among them 100 million have developmental disabilities. Through its products and services Therap would like to contribute positively to the disabilities community.