

COLLABORATIVE NETWORK TECHNOLOGIES

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FieldMetrix™ Home Care Edition – Business Case

White Paper

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## Introduction

As today's professionals become increasingly mobile, there is an ever greater demand for wireless applications that allow fast efficient data transfer, and access to the most up-to-date information. Home care nurses are no exception, indeed, these professionals would benefit more than most from such applications. To effectively perform their duties, home care professionals require timely access to accurate client data, and they need to document their visits in a manner that is efficient, accurate and secure. This process can result in time-consuming paper documentation and frequent contact with the office for updates to their schedules, or patient information.

FieldMetrix™ Home Care Edition offers a complete mobile solution for managing client data at the point of care. It gives home care providers easy access to work schedules, client care plans, and the most current client information while they are in the field. Data collected by care providers during a visit, can immediately be transmitted back to the office for client assessment, billing, or other purposes.

FieldMetrix has been designed to integrate with existing client management software. Organizations can incorporate FieldMetrix into their existing operations without having to modify their current client management environment. Data is transmitted easily to the client management software, allowing the office improved access to accurate information for client monitoring, service delivery, and billing.

## Key Features

### ***Design***

FieldMetrix has been designed to run on the most popular and widely available handheld platform – PalmOS – and has been used on a variety of devices that support this platform. The *flexible integration architecture* design of the FieldMetrix Server provides easy integration with many client management suites.

### ***Increased Accuracy of Information***

FieldMetrix can help ensure that both home care workers and office staff have access to the most timely and accurate information available. Visit documentation occurs only once – at the point of care – and it is stored automatically in the client management software when the nurse transmits it to the office. At the same time, updates to visit schedules and client information are transmitted to the nurse in the field, ensuring that they always have the most recent information.

### ***Flexible Communications Model***

FieldMetrix has a flexible communications model, supporting data transmission via wireless, modem, and PC/cradle connections. This ensures that if a nurse is unable to connect to the office wirelessly, there are additional options available. The application is also available offline. Nurses do not have to maintain a constant connection to the office in order to use FieldMetrix. Once they have their information loaded into their handheld device, they can conduct their visits.

### ***Ease of Use***

FieldMetrix makes use of a simple, form based interface. Most information is entered via check lists, or as brief text entries. Users of FieldMetrix are fully trained in how to use the program, and generally learn to use the program very quickly, often in a single, half day session.

## **Benefits**

FieldMetrix Home Care offers a number of key benefits to nurses and home care organizations including:

### ***Reduced Need for Paper Documentation***

Using FieldMetrix, data-capture happens only once - at the point of care. Additionally, because the home care nurse has access the client's record through the handheld device the nurse can attend each appointment carrying only the handheld device and required supplies. Once client data is collected by the nurse, it is transmitted electronically to central office where it is integrated automatically into the client management system.

### ***Improved Consistency and Quality of Service***

FieldMetrix allows home care organizations to define a standard set of client service protocols. Each service provided to a client is based on these standardized definitions. As each service is provided in the home, the nurse completes the required fields on the handheld device. Additional fields allow the home care nurse to personalize their notes, by adding their own observations and other information to the visit record. Each visit is time stamped, allowing for analysis for service planning and scheduling. These features improve the consistency and quality of the data that is provided to and collected from home care nurses.

### ***Access to the Most Current Client Information***

FieldMetrix allows two-way data transmission: nurses in the field

are updated with changes to client information; and the office is updated with changes made by the nurse. This ensures that nurses always have access to the most current client data (including contact, medication, and allergy information), and the client record is automatically updated when changes occur in the field. Necessary adjustments can be made to the client's care plan and personal information in a timely manner.

***Documentation as Part of Service Delivery***

One of the key benefits of FieldMetrix is the ability to combine service delivery with visit documentation. Once the documentation has been completed and transmitted, it is automatically integrated into the client record, with no further steps necessary from the nurse, or any member of the office staff. This means less time spent documenting, allowing nurses to spend more time on each visit, or complete more visits in a day.

## Business Case

### ***Increased Efficiency from Existing Staff***

By displaying a full daily schedule and keeping them automatically informed of changes to that schedule, home care nurses can more efficiently plan their days travel.

Automatic documentation allows nurses to spend more time visiting clients and less time documenting visits. By entering the service information into the handheld in the client's home, the nurse is automatically documenting their visit, eliminating the need to do it later in the day.

Client information is always current and always available to the nurse, reducing the need for phone calls or visits to the office. Nurses do not need to travel back to the office to pick up schedules or client care plans.

As a result of these features, nurses may be able to see more clients in a day, better leveraging existing nursing resources.

### ***Improved Service Planning***

FieldMetrix allows the creation of a standardized protocol set that defines the required services for particular clients resulting in more consistent service delivery.

The start and end times for each visit are time stamped. This information can be used for scheduling and service planning.

FieldMetrix automatically keeps an historical record of service provision across multiple clients/providers. For instance, a nurse can view the last five blood pressure readings entered for a specific client. This is useful in identifying general trends in client health data as well as exceptions to that information.

***Easy integration with existing clinical and management systems***

The design of FieldMetrix allows integration with existing scheduling and care planning systems. Service delivery protocols are customizable by the organization and can be matched with current care plans. FieldMetrix can be integrated with the client management system and service protocols used by the organization. This ease of integration can significantly reduce the need for additional technology investments by the home care organization to incorporate mobile data services.

***Turn-key technology support***

Before each FieldMetrix deployment, ColabNet provides a full needs assessment and operation planning process, to ensure that implementation is as smooth as possible and meets the requirements of the client. ColabNet continues to provide organizational support throughout the life cycle of the application. Additionally, FieldMetrix uses off-the-shelf technologies such as Java, Oracle, Palm OS and SQL Server, further simplifying support services.

***FieldMetrix offers a unique solution within the marketplace***

*Other Palm-based nursing applications are standalone, with no connectivity.*

- FieldMetrix connects the office with the home care nurses, allowing for efficient information exchange and storage

*Other Point-of-care solutions require expensive lap-tops as the field device.*

- FieldMetrix makes use of inexpensive, readily available handheld devices that are small and easily transportable. This includes new integrated cell phone /Palm devices.

*Other Point-of-care solutions only link to vendors own client management systems.*

- FieldMetrix uses an open data model that allows integration with a variety of client management systems

## Scenario for Use

Homecare nurses are supplied with FieldMetrix enabled handheld devices. Each day they will be required to download their daily schedules, which are transmitted to the device from the office's client management software program. For each scheduled client, the nurse can view all of the required information including:

- Address
- Contact information
- Medication and allergy data
- Services to be performed during the visit.

Since this information is coming directly from the client management software, the nurse is assured that the information is complete. Upon reviewing the schedule for the day, the nurse can plan the visits, and prepare what they will need for each visit.

Once at the client's home the nurse begins the visit. The handheld is used to make any required changes to the client's demographic information, as well as edit the client's contacts, medications or allergies. The handheld displays the services required for each visit, as well as areas to record medical readings, observations, and other notes. Once the visit has been completed the nurse uses the handheld to upload the documentation to the office, where it is added to the client's record through a wireless connection. If a wireless service is not available the nurse can wait until they are back in the coverage area or until they return to the office to synchronize their data. All of the documentation for the visit is complete, with no further input necessary from the nurse. As the information from the nurse is uploaded, changes to their schedule are downloaded to the handheld device. The nurse repeats this process for each scheduled client and at the end of the day, no further documentation is required.

Participants in live FieldMetrix trials reported that the FieldMetrix technology was effective in assisting them in the management and delivery of their services. The nurses were given a half-day orientation to FieldMetrix, which was sufficient to allow the nurses to “go live” in clients’ homes. Once trained, the nurses required minimal assistance from the support team to effectively use FieldMetrix. At the conclusion of the trials the nurses involved believed that a full implementation of FieldMetrix could provide sufficient savings in documentation and travel time to increase the number of visits done by each nurse per day. The documentation capabilities of FieldMetrix were referenced specifically as a major benefit of the application.