



# Computers and Medical Technology : Old Problem, New Cure

Michael Adams

# What is the problem?

- ◆ Short on staff
- ◆ Monotonous paperwork for Administration
- ◆ Mistranslation by Administration and medical transcriptionists.
- ◆ Overload of paperwork on Nurses
- ◆ Doctors lack of knowledge of computer technology



# What we are doing

- ◆ Programming the Palm Pros to accept information directly from the doctor without a medical transcriptionist
- ◆ Creating a network database that reads the Palm Pros and does all necessary paperwork
- ◆ Datastreams from other hospitals create and modify the present network
- ◆ Files created by Administration or sent by datastream are automatically being updated



## What we are doing (cont)

- ◆ Insurance information and outcare information is sent to the appropriate place over the dedicated lines
- ◆ Any multiple use of information on separate forms are called from previous uses



# What equipment is being used?

- ◆ 3 Com Palm Pro
- ◆ File Maker Pro 4
- ◆ Excel for Palm Pro
- ◆ Outside datastream



# How are we doing it?

- ✦ File Maker Pro is compatible and converted into a Palm Pros Excel "database"
- ✦ Three files must exist for the conversion from the datastream
- ✦ Relationship files are created from the names used in the fields
- ✦ Multiple forms are created using the relationship files



## How are we doing it? (cont)

- ◆ Pop up options are created for the doctors for quick references
- ◆ Individual calculations for preferred dosage are already calculated when drug is chosen
- ◆ Special written notes on Palm Pro are allowed at the foot of each document
- ◆ Palm Pro alerts the doctors of any special conditions or allergies



# Why this equipment?

- ◆ File Maker Pro works the best with Palm Pro Excel
- ◆ Palm Pro allows point and click, writing with a pen, appointment scheduler, and reference names and numbers
- ◆ Palm Pro allows quick hotsinking into the computers
- ◆ Palm Pros easily accessibility by the doctors





## Why this equipment? (cont)

- ◆ File Maker Pros easy GUI functions, capabilities, ability to be accessed by doctors at home by the Internet if necessary
- ◆ The Relationship names have a easy quickreference for new Administrators



# Problems with this equipment

- ◆ Accessing and processing the datastream requires at least 3 files
- ◆ The Palm Pro has no real database ability that isn't given to it by File Maker Pro
- ◆ Ensuring the relationships between forms is harder
- ◆ Number of Palm Pros as opposed to doctors



# How and when is "hotsinking" done?

- ◆ Hotsinking is the process of putting the Palm Pro in an adapter and allowing the network to download all changes made on the Palm Pro since last hotsink
- ◆ Hotsinking will be allowed by one or more stations in each department
- ◆ It will be mandatory at noon and the end of the day



## How will the hospital benefit?

- ◆ Due to lack of personnel, the nurses and medical translators will be used where they are really needed
- ◆ New files will not need to be created each time a patient is transferred or makes a visit
- ◆ The paper work for Administration alone will be cut by 1/3 or more ( an average of 6 to 10 hours per administrator)



# How will the hospital benefit ? (cont)

- ◆ New administrators will have an easier time adapting to the process than the older fashion
- ◆ In emergencies doctors will have access to complete medical files no matter which doctor saw the patient last
- ◆ Since all information is backed up, if a file is lost, the backup can easily be accessed by doctors



# How will the hospital benefit ? (cont)

- ◆ Insurance papers and other out of office forms will be filed, sent electronically, and processed, completing them twice as fast
- ◆ Emergency rooms in other states can have complete files with insurance information within minutes of talking to the patients normal doctor



# Real Benefits for Hospitals



- ◆ Hospitals which are short of funding and labor will save large amounts of money in the long run and the patients will have better coverage when they are with or away from their normal doctor





Thank You For Your Time

THE END.