

Hocus, Pocus! Even MORE About FOCUS!!

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Introductions

Speaker Info:

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Objectives

- ***Acquire*** a basic understanding of MEDITECH's newest generation of HIS software, 6.x, built on a proprietary technology platform called FOCUS.
- *Become **empowered*** with the knowledge necessary to make wise and well-informed decisions about your own possible migration to the FOCUS platform.



TECHNOLOGY

Defining NPR

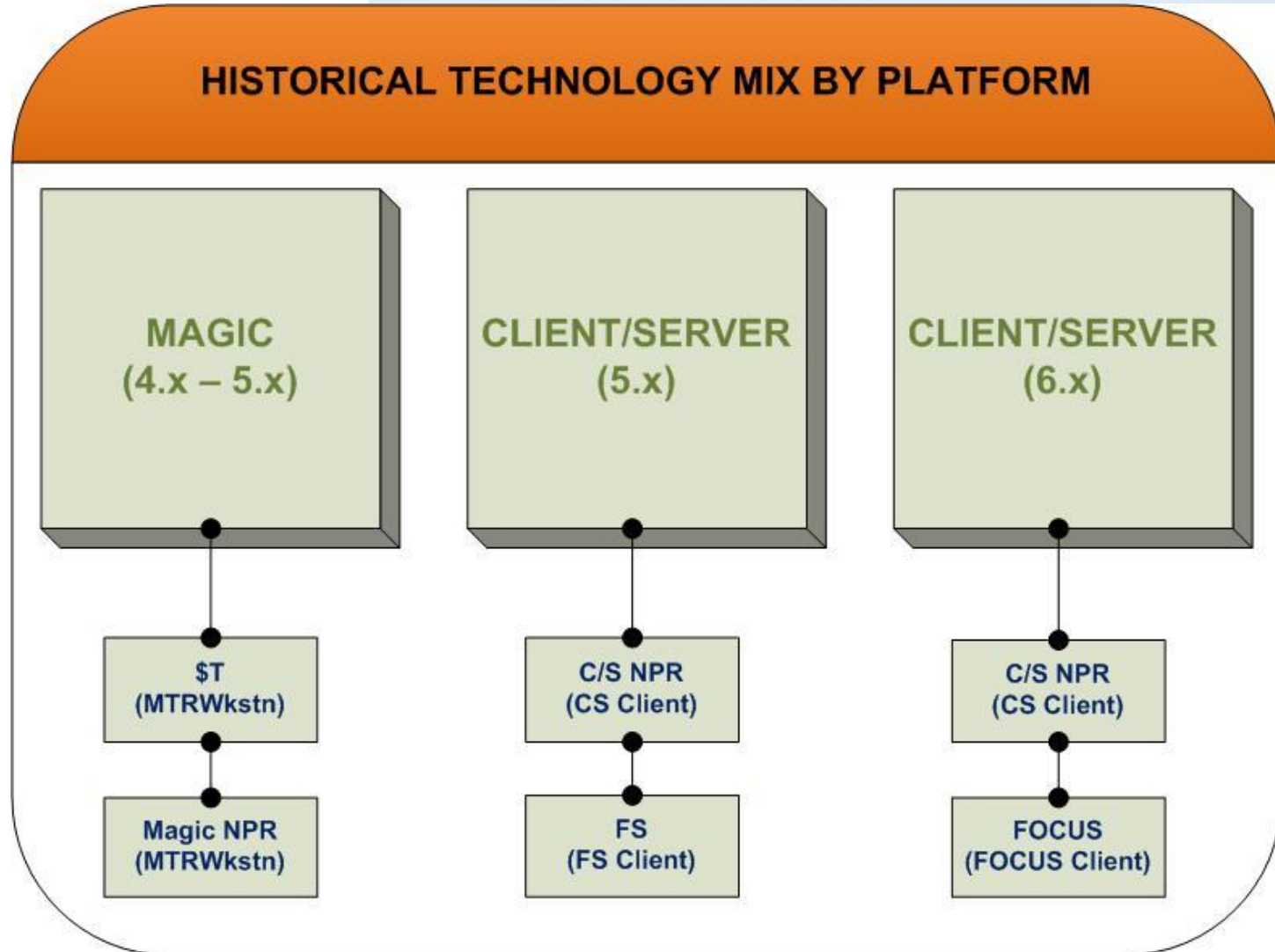
- “Non-FOCUS” Client/Server technology
- **Includes ALL 5.x versions (5.0 – 5.6)**
- It is a technology, not a report writer!

What is FOCUS?

- Development environment built for FS language
- **FOCUS is to FS what NPR MAGIC was to \$T MAGIC**
- New “Chronological” Database Technology
- **Optimized Network Management**
- New User Interface Tools for Screens / Reports

Platform History

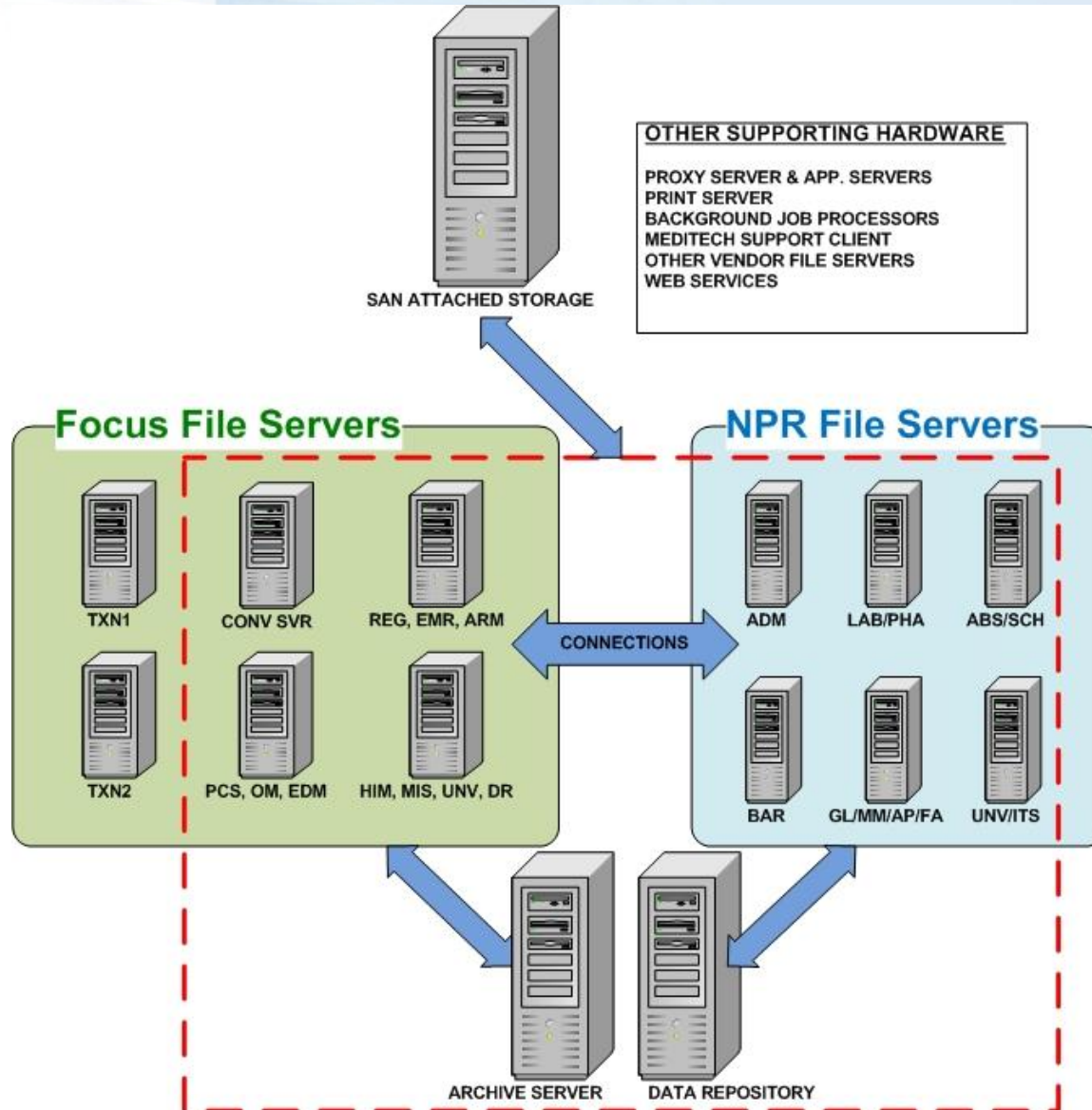
HISTORICAL TECHNOLOGY MIX BY PLATFORM



What Is Client/Server 6.0?

- Hybrid of NPR and FOCUS Applications
- **In 6.0 Adv. Clinicals are written in FOCUS (EMR, PCS, EDM, OM, along with HIM and MIS)**
- Introduction of MEDITECH's next generation
- **FOCUS and NPR linked by “connections”**
- *Nearly Identical UI across FOCUS and NPR*

What Is Client/Server 6.0?



What Is FS?

- **FS = new(er) programming language**
- **Stands for “Functional System”**
- **Interpreted language with lots of function calls**
- **Emphasis on client-side processing**
- **Very little support of Data Defs & Variables**



CODE COMPARISON

'Hello World' in MAGIC

```
T(“”)^#,  
N(“Hello World!”)^#;
```

Clear the screen & position at top

Write Hello World to the screen

Hello World in FS

```
:Code Main ← Name of Function
`200,300'@lw@OW, ← Create a window
"My First App"@lh ← Add a title to the window
"Hello World!!"@Wb, ← Output string in the foreground
DO{@RK~=27}@CW; ← Exit when user presses 'ESC'
                  Close the window
```

Hello World in FOCUS

#Translation

:Options

Result

MSFile

:Product

Type

Unstructured

#Preamble

:Options

Type

Process

#Magic

:Code Main

`200,300'@lw@OW,

"My First App"@lh

"Hello World!!" @Wb,

DO{@RK~=27}@CW;

← Same as FS code in the Main body

Hello World in FOCUS

#Translation

:Options	
Result	MSFile
:Product	
Type	Unstructured



Used to determine
"run-time" behavior

#Preamble

:Options	
Type	Process

#Magic

```
:Code Main
`200,300'@lw@OW,
"My First App"@lh
"Hello World!!"@Wb,
DO{@RK~=27}@CW;
```

Hello World in FOCUS

#Translation

:Options

Result

MSFile

:Product

Type

Unstructured

#Preamble

:Options

Type

Process

Defines the Object type
i.e. how this object will be "called"

#Magic

:Code Main

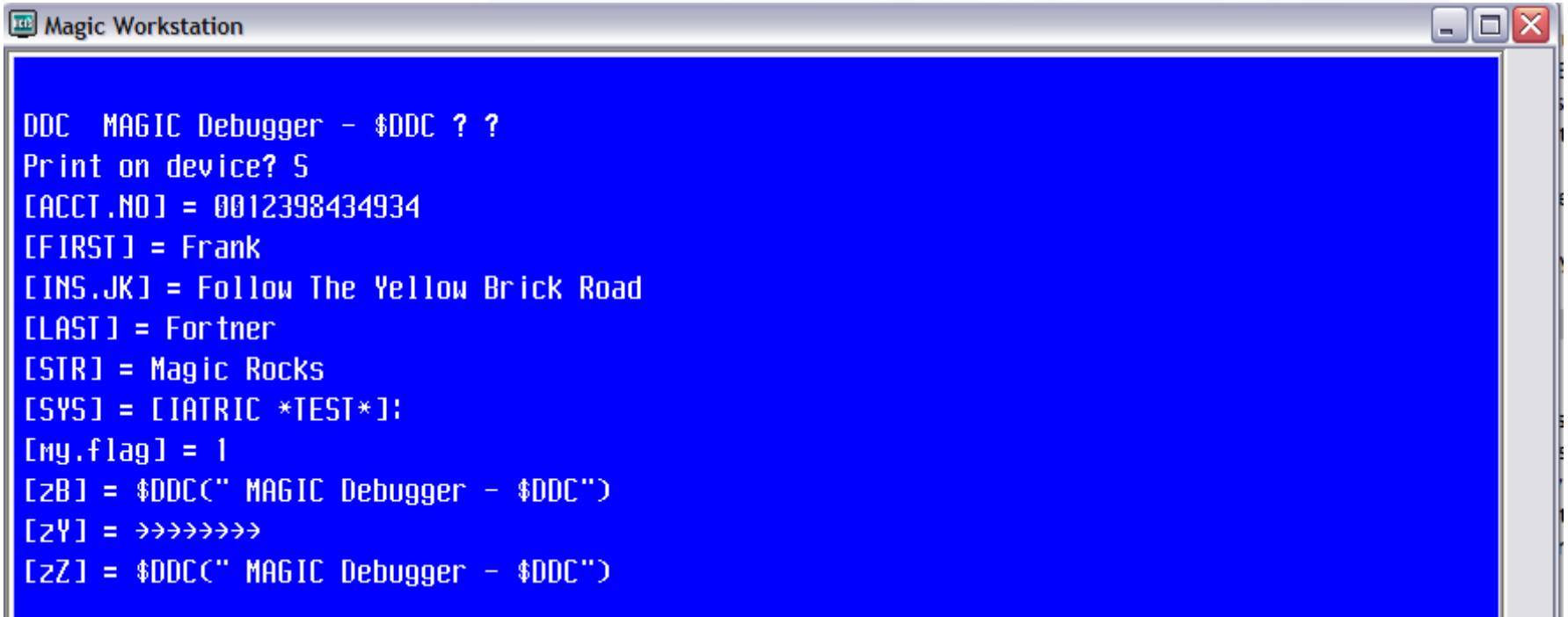
`200,300'@lw@OW,

"My First App"@lh

"Hello World!!"@Wb,

DO{@RK~=27}@CW;

MAGIC Debugger

A screenshot of a window titled "Magic Workstation" with a blue background. The window contains white text representing debugger output. The text includes a header line, a confirmation prompt, and several variable assignments. The window has standard Windows-style window controls (minimize, maximize, close) in the top right corner.

```
DDC  MAGIC Debugger - $DDC ? ?  
Print on device? S  
[ACCT.NO] = 0012398434934  
[FIRST] = Frank  
[INS.JK] = Follow The Yellow Brick Road  
[LAST] = Fortner  
[STR] = Magic Rocks  
[SYS] = [IATRIC *TEST*]:  
[my.flag] = 1  
[zB] = $DDC(" MAGIC Debugger - $DDC")  
[zY] = >>>>>>>>  
[zZ] = $DDC(" MAGIC Debugger - $DDC")
```

FOCUS Debugger!

The screenshot shows the Focus Debug Utility window. The title bar reads "Focus Debug Utility". The main window title is ".\@Break(INPUT)" with a "Break" button on the right. Below the title bar is a table with two columns: "Set name" and "Member name". The table contains three rows: "g-Common" with member ":Code d, integrated debugger", "g-Common" with member ":Code 2 Main", and "g-Common" with member ":Code 0 Preamble". A mouse cursor is pointing at the first row. Below the table is a "Locals" section with a table containing three rows: "A" with value "{", "B" with value "\"infoargs.txt\"", and "P" with value " ". At the bottom of the window is a control bar with buttons: "?", "Next Break", "Run", "Halt", "Empty Log", "To Clipboard", "Prior", "Next", "Back", and "Save". On the right side of the window is a vertical toolbar with buttons: "Objects", "Records", "Data", "Instance", "Screen Info", "Locals", "States", "System", "Mutexes", "FS Globals", "FS Locals", "Stack", "Stack - Dec", "Stack - Hex", "Lists", "Member", "System Info", "Call Stack", "Sets", "Log", and "Ping".

Set name	Member name
g-Common	:Code d, integrated debugger
g-Common	:Code 2 Main
g-Common	:Code 0 Preamble

Locals

A	{	\@Break(INPUT)}
B	"infoargs.txt"	
P		

? Next Break Run Halt Empty Log To Clipboard Prior Next Back Save

Objects
Records
Data
Instance
Screen Info
Locals
States
System
Mutexes
FS Globals
FS Locals
Stack
Stack - Dec
Stack - Hex
Lists
Member
System Info
Call Stack
Sets
Log
Ping



USER INTERFACE

New Screen Technology

- **Menu Navigation**
- Desktop Screen Regions
- **Data Entry Screens**
- FOCUS vs. NPR
- **Lookups**
- History / Audit Trail

Menu Navigation

Test System - (TEST 6.04) - Reed,David Iatrics
Facility: IAT 05/16/08 14:14 EDT

Mix of FOCUS and NPR Routines

- MIS
 - Data Repository (Focus)
 - Data Repository (NPR)
 - Customization
- Analyst Desktop (NPR)
- Alerts
- Background Jobs
- Connections
- Report Queues
- Activity Logs
- Archived Documents
- Reports
- Word Processing
- Dictionaries**
- My Settings
- Emulate Person

- Parameters (Focus)
- System Preferences (NPR)
- Administrative
 - Alerts
 - Clinical
 - Coding
 - Communication
 - Customer-Defined Data
 - Document
 - Financial
 - General Ledger
 - Person/Profile**

- Person**
 - ESignature Alternates
 - ESignature Co-Signers
 - Access
 - Person Location
 - Person Profile
 - Person Security Group
 - External Link
 - External Link Group
 - Provider Group
 - Provider Type
 - Provider Download File
 - Web User

Bolded Selections; Creates "Visual Pathway"

Facility

Role-Based Desktop

Analyst Desktop - (Test) - User Iatrics Last Update: 05/18/08 - 2114

“Analyst Desktop”

System Information		
<input checked="" type="radio"/> File Servers	<input checked="" type="radio"/> Network	<input checked="" type="radio"/> SAN Backup
<input checked="" type="radio"/> Background Job Clients	<input checked="" type="radio"/> Print Servers	
<input checked="" type="radio"/> Application Servers	<input checked="" type="radio"/> Alert Service	

Application Information		
<input checked="" type="radio"/> Accounts Payable	<input type="radio"/> Fixed Assets	<input checked="" type="radio"/> Payroll/Personnel System
<input checked="" type="radio"/> Admissions Module	<input type="radio"/> General Ledger	<input checked="" type="radio"/> Pharmacy Module
<input type="radio"/> Authorization & Referral Manag...	<input type="radio"/> Health Information Managemen...	<input type="radio"/> Quality/Risk Management
<input checked="" type="radio"/> Billing/Accounts Receivable	<input checked="" type="radio"/> Laboratory Module	<input checked="" type="radio"/> Radiology And Departmental Mo...
<input checked="" type="radio"/> Case Mix Abstracting Module	<input type="radio"/> MEDITECH Healthcare Informati...	<input type="radio"/> Registration (Focus)
<input type="radio"/> Conversion Utilities	<input checked="" type="radio"/> Materials Management Module	<input checked="" type="radio"/> Scheduling
<input checked="" type="radio"/> Cost Accounting	<input checked="" type="radio"/> Medical Records Indexing Module	<input checked="" type="radio"/> The HUB
<input type="radio"/> Data Repository (Focus)	<input checked="" type="radio"/> Medical Records Management	<input type="radio"/> Upgrade Tools
<input type="radio"/> Electronic Medical Record (Focus)	<input checked="" type="radio"/> Meditech Healthcare Informatio...	<input type="radio"/> Universe (Focus)
<input type="radio"/> Emergency Department Manage...	<input type="radio"/> Order Management (Focus)	
<input checked="" type="radio"/> Executive Support System	<input type="radio"/> Patient Care System (Focus)	

Appl Status

All Alerts

Alert Snapshot

Unique Jobs

All Bkg Jobs

Bkg Clients

Archive Docs

ES Activity

Rpt Scheduler

Interface Mgr

Change HCIS

Cancel Refresh ?

Desktop Screen Regions

The screenshot shows a desktop application window titled "Physician Care Manager - (TEST 6.04) - Reed,David Iatricis". The interface is divided into several regions:

- HEADER:** Located at the top of the window, it contains patient information: "TEST,LAB", "9 M 12/05/1998", "5S 506-A", "Adm Inpatient", "Allergy/AdvReac: Not Recorded", and "Emr# 100000145 100000000156". Below this are navigation tabs: "Clinical", "Legal/Indicators", "Demographics", and "Referrals".
- BODY:** The main content area, containing several data tables:
 - Problem:** Table with columns: Problem, Curr Visit, Status, Diagnosis, Date.
 - Allergy/AdvReac:** Table with columns: Allergy/AdvReac, Type, Severity, Reaction, Status, Date.
 - Home Medication:** Table with columns: Home Medication, Instructions, Last Confirmed, Status.
 - Patient Pharmacy:** A single-row table.
 - Procedure:** Table with columns: Procedure, Code, Last Date.
 - Diagnosis:** Table with columns: Diagnosis, Code, Last Date, Visits.
- FOOTER:** A dark blue bar at the bottom containing an "Archive" button.
- MENU:** A vertical sidebar on the right side of the window, containing a list of navigation options: "My Notices", "Patient Lists", "Next Patient", "Select Visits", "Summary", "Review Visit", "Notices", "New Results", "Clinical Panels", "Vital Signs", "I & O", "Medications", "Laboratory", "Microbiology", "Blood Bank", "Reports", "Patient Care", "Notes", "Orders", "Amb Orders", "Document", and "Preferences".

BODY

HEADER

FOOTER

MENU

Data Entry Screens

Group Response Dictionary - (TEST 6.04) - Iatrics,User

LABPTPTT - PT/PTT RESPONSES Last Edit: 09/13/07 07:02

Main Elements ← **Multi-Page Controls**

Element Mnemonic	*Element Name	Rank	Value
A	ASPIRIN	1	
C	COUMADIN	2	
H	HEPARIN	3	
HB	HEAPRIN-BOLUS	4	
HC	HEPARIN/COUMADIN	5	

← **Navigation (Scroll) Bars**

Mnemonic E & M Coding Bullet Name

+ x

Document Comment Text

Chosen Menu Option → View
New
Edit
Report

Historical Audit Trail → History

New Cancel & Save Buttons → Cancel Save

? [Home] [Back] [Forward] [Print]

History

Group Response Dictionary - (TEST 6.04) - Iatrics,User

LABPTPTT - PT/PTT RESPONSES

Dictionary History

Transaction Current

Date/Time	User	Client
09/13/07 07:02	Iatrics,User	MIMIS
07/23/07 17:32	Mt,Meditech	MTBJP11
05/22/07 15:29	Mt,Meditech (meditech)	MTFS07

Record Type

- Main
- HhInput
- Identifiers
- Words
- GroupElements

Instances

- ElementMnemonic
- A
- C
- H
- HB
- HC
- N

History

When	Action	ElementResponse	ElementRank	ElementValue
09/13/07 07:02	edit	ASPIRIN	1	
07/23/07 17:32	edit	ASPIRIN		
05/22/07 15:29	new	ASPIRIN		

Choose Record (Segment)

Choose Entry

Lists changes over time

Lookups

Group Response Lookup

Search

Name	Active	Mnemonic
Pt. Care Ref - Behavior	Yes	PD.PCR4
Pt. Care Ref - Communication	Yes	PD.PCR3
Pt. Care Ref - Disabilities	Yes	PD.PCR1
Pt. Care Ref - Impairments	Yes	PD.PCR2
PT/PTT RESPONSES	Yes	LABPTTT

Type full or partial mnemonic and press <Enter> - Choices populate in window below

Lookup Options

- Identifier
- Mnemonic
- Name
- Any Word
- Active
- Inactive
- Both

Lookups

Favorites Category Name 0 Queued

Orders by Name

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	Del	Clear	List
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----	-------	------

Order Tra|

Type-ahead Technology

Stylus-Input Keyboard

	Tra
<input type="checkbox"/>	Tracheostomy Tray
<input type="checkbox"/>	Tracker Infus Catheter [RAD]
<input type="checkbox"/>	Transbronchial Biopsy
<input type="checkbox"/>	Transcath Thrombolization [RAD]
<input type="checkbox"/>	Transesophageal Echo
<input type="checkbox"/>	Transferrin [RL]
<input type="checkbox"/>	Transforam Lum Single [RAD]
<input type="checkbox"/>	Transforaminal Lum Add [RAD]

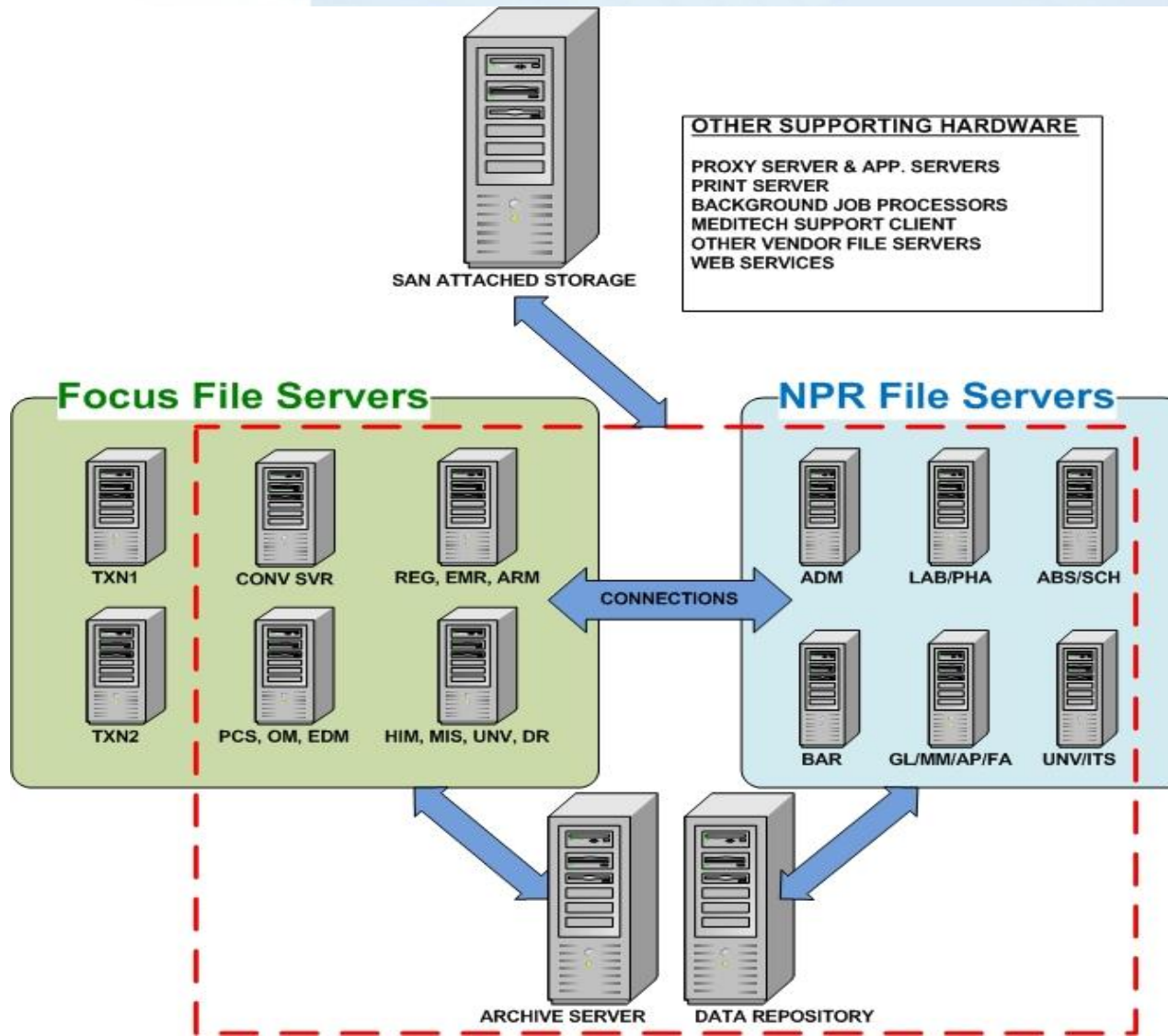


HARDWARE

Typical Configuration (151 – 300 beds)

- 3 NPR and 4 Focus File Servers
- **SAN attached storage**
- 2 Transaction Servers
- **9 Background Job Processors**
- Other needed machines
(for example, conversion server)

Hardware



System Architecture

Transaction Server

- **Controls all database writes**
- **Protects database from client/user failure**
- **Backups are transactionally aware across servers**
- **Roll-forward a database from a prior backup**

System Architecture

Conversion Server

- Limit Downtime
- **Allow for database file conversions to be performed offline**
- Transactions can be rolled in and also converted offline

Chronological Database

- **Append Only – No Edits or Deletes**
- **Increased Reliability**
- **Natural complete historical audit**

FOCUS Database

```
{MsGrpGe|A|{{ASPIRIN}|~}}
{MsGrpGe|C|{{COUMADIN}|~}}
{MsGrpGe|H|{{HEPARIN}|~}}
{MsGrpGe|HB|{{HEAPRIN-BOLUS}|~}}
{MsGrpGe|HC|{{HEPARIN/COUMADIN}|~}}
{MsGrpGe|N|{{NONE}|~}}
{MsGrpHi|{~|~}}
{MsGrpIds|M|LABPTPTT|{~|~}}
{MsGrpIds|N|PT/PTT RESPONSES|{~|~}}
{MsGrpMn|{{LABPTPTT|Y|PT/PTT RESPONSES||10|3}|~}}
{MsGrpwds|LABPTPTT|{~|~}}
{MsGrpwds|PT|{~|~}}
{MsGrpwds|PTT|{~|~}}
{MsGrpwds|RESPONSES|{~|~}}
!bt|{{{20070522.192937||1529|R|+}}|MTFS07|meditech||{MT|}|MT|Mt,Meditech (meditech)|{|1|1}}

{MsGrpGe|A|{{ASPIRIN|}|}|{|1|}}
{MsGrpGe|C|{{COUMADIN|}|}|{|1|}}
{MsGrpGe|H|{{HEPARIN|}|}|{|1|}}
{MsGrpGe|HB|{{HEAPRIN-BOLUS|}|}|{|1|}}
{MsGrpGe|HC|{{HEPARIN/COUMADIN|}|}|{|1|}}
{MsGrpGe|N|{{NONE|}|}|{|1|}}
{MsGrpHi|{{A|C|H|HB|HC|N}}|{|1|}}
!bt|{{{20070723.213241||1732|R|+}}|MTBJP11|meditech||{MT|}|MT|Mt,Meditech)|{|1|1}}

{MsGrpGe|A|{{ASPIRIN|1|}|}|{|1|}}
{MsGrpGe|C|{{COUMADIN|2|}|}|{|1|}}
{MsGrpGe|H|{{HEPARIN|3|}|}|{|1|}}
{MsGrpGe|HB|{{HEAPRIN-BOLUS|4|}|}|{|1|}}
{MsGrpGe|HC|{{HEPARIN/COUMADIN|5|}|}|{|1|}}
{MsGrpGe|N|{{NONE|6|}|}|{|1|}}
!bt|{{{20070913.70242||0702|R|+}}|MIMIS|iatrixs||{iatrixs|}|iatrixs|Iatrixs,User)|{|1|1}}
```

Initial Entry 5/22/07

Edit on 7/23/07

Edit on 9/13/07



CONNECTIONS

Quick Facts

- “Connection” is synonymous with interface
- **MT-2-MT Interfaces have always existed**
- The difference here is platform-2-platform

Connections

The image shows a hierarchical menu structure on a light blue background. The menu items are as follows:

- Info Systems** (dropdown arrow)
 - Clinical (dropdown arrow)
 - Administrative (dropdown arrow)
 - Ancillary (dropdown arrow)
 - Financial (dropdown arrow)
- MIS** (dropdown arrow)
 - Data Repository (dropdown arrow)
 - Customization (dropdown arrow)
- Analyst Desktop (NPR)
- Alerts (dropdown arrow)
- Background Jobs (dropdown arrow)
- Connections** (dropdown arrow)
 - Report Queues (dropdown arrow)
 - Activity Logs (dropdown arrow)
 - Archived Documents (dropdown arrow)
 - Reports (dropdown arrow)
 - Word Processing (dropdown arrow)
 - Dictionaries (dropdown arrow)
 - My Settings (dropdown arrow)
 - Emulate Person
- Manage Outbox (Focus)
- Manage Inbox (Focus)** (dropdown arrow, highlighted in green, with a red arrow pointing to it)
- Interface Manager (NPR)
- Connection Manager (NPR)
- Manage Event Queue (Focus)
- Manage Event Reader (Focus)
- View Dictionaries (dropdown arrow)

Connections

Manage Inbox Connections - (TEST 6.04) - IATRIC,SYSTEMS

0 of 21 Selected

<input checked="" type="checkbox"/>	Connection ▾	Bkg Job Status	Bkg Job Client	Unprocessed Msgs	Inprocess Msgs
<input type="checkbox"/>	ARM Authorizations	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	Abstract Data	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	EMR Dictionaries	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	EMR ITS Reports	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	EMR Laboratory Data	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	EMR Notices	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	EMR Pharmacy Data	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	HIM ADT Inbox	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	HIM SCA Documents	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	MIS Archive Data	ACTIVE	WAM-BG13	NOT COUNTED	0
<input type="checkbox"/>	MIS Dictionaries	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OM CWS Orders	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OM Dictionaries	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OM ITS Orders	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OM LIS Orders	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OM PHA Orders	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	OR Data From NPR	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	PCS Next Medications	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	PCS Sch Assessments	ACTIVE	WAM-BG13	0	0
<input type="checkbox"/>	SCH Appointments	ACTIVE	WAM-BG13	0	0

Msg Filer	ARM Authorizations
Del Svc	Folder
Sender	Magic NPR Application

From NPR to FOCUS

Connections

Manage Outbox Connections - (TEST 6.04) - IATRIC,SYSTEMS

0 of 10 Selected

Connection	Bkg Job Status	Bkg Job Client	Last Queued	Last Processed	Msgs Pending
<input checked="" type="checkbox"/> EMR Documentation	ACTIVE	WAM-BG13			0
<input type="checkbox"/> Email	ACTIVE	WAM-BG13			0
<input type="checkbox"/> MIS Alerts	ACTIVE	WAM-BG13	499018 - 05/16/09 11:21	499018 - 05/16/09 11:21	0
<input type="checkbox"/> MIS B/AR Batches	ACTIVE	WAM-BG13	497912 - 05/16/09 00:00	497912 - 05/16/09 00:00	0
<input type="checkbox"/> MIS Dictionaries	ACTIVE	WAM-BG13	497584 - 05/15/09 15:36	497584 - 05/15/09 15:36	0
<input type="checkbox"/> OM CWS Orders	ACTIVE	WAM-BG13	497583 - 05/15/09 15:07	497583 - 05/15/09 15:07	0
<input type="checkbox"/> OM ITS Orders	ACTIVE	WAM-BG13	497583 - 05/15/09 15:07	497583 - 05/15/09 15:07	0
<input type="checkbox"/> OM LIS Orders	ACTIVE	WAM-BG13	497583 - 05/15/09 15:07	497583 - 05/15/09 15:07	0
<input type="checkbox"/> OM OV Orders	ACTIVE	WAM-BG13	497583 - 05/15/09 15:07	497583 - 05/15/09 15:07	0
<input type="checkbox"/> OM PHA Orders	ACTIVE	WAM-BG13	497583 - 05/15/09 15:07	497583 - 05/15/09 15:07	0

Msg Gen Documentation
Del Svc Folder
Recipient Magic NPR Applications

Action Items

- Select
- Messages
- Halt
- Change Client
- Activate
- Inactivate

From FOCUS to NPR



CDS & ATTRIBUTES

Quick Facts

- **Customer-defined screens exist in FOCUS**
- **Basic Attributes exist in FOCUS**
- **Rules in FOCUS allow for complex logic**

CDS & Attributes

Analyst Desktop (NPR)

Alerts ▶

Background Jobs ▶

Connections ▶

Report Queues ▶

Activity Logs ▶

Archived Documents ▶

Reports ▶

Word Processing ▶

Dictionaries ▶

My Settings ▶

Emulate Person

MIS Parameters

System Preferences (NPR) ▶

Administrative Dictionaries ▶

Alert Dictionaries ▶

Clinical Dictionaries ▶

Coding Dictionaries ▶

Communications Dictionaries ▶

Cust-Defined Data Dictionaries ▶

Document Dictionaries ▶

Financial Dictionaries ▶

General Ledger Dictionaries ▶

Group Response

Query

Record (Focus)

Screen (Focus) ←

Screen (NPR) ▶

CDS & Attributes

Screen Dictionary - (TEST 6.04) - IATRIC,SYSTEMS
OEADMITMSG - ADT ED Admit Request
Last Edit: 10/14/08 14:37

Main Preview Edit Preview View

Screen OEADMITMSG

Mnemonic OEADMITMSG

*Active Yes

*Name ADT ED Admit Request

Data Record OM Orders

*Type of Block	New Row	Block Label	Block Style
Single Response Queries	Yes		

Text

*Type	Query	Text	Lines
Query	OEADMACTNO	Acct #	
Query	OEADMATTDR	Att Dr	
Query	OEADMADMDR	Adm Dr(IF diff)	
Query	OEADMPTNAM	Name	
Query	OEADMDX	Diagnosis	

Default	String
Default String	
Default Rule	
Editable	Yes
Editable Rule	
Required	No
Required Rule	
Suppress	No
Suppress Rule	

Basic Screen Attributes

Rule Editor

MIS Rule Dictionary - (TEST 6.04) - IATRIC,SYSTEMS
BPM - Blood Pressure Mean Last Edit: 09/16/08 15:51

Rule

Mnemonic

*Active

*Name

Category

*Mode

MIS Rule Dictionary - (TEST 6.04) - IATRIC,SYSTEMS
BPM - Blood Pressure Mean Last Edit: 09/16/08 15:51

Variable	External	Description
V1	▼	
V2		
V3		
BloodPressure	Yes	Expects data in the format: 120/80
Systolic		
Diastolic		
Length		

+ x

Field	Var	Key 1	Var	Key 2

Rule Editor

MIS Rule Dictionary - (TEST 6.04) - IATRIC,SYSTEMS

BPM - Blood Pressure Mean Last Edit: 09/16/08 15:51

Main Variables Rule

Enter Line Undo Back Space Cancel Line End Line

Line	Rule English Display
1	From BloodPressure, Find the starting position of "/", SaveAs V1
2	Get the length of BloodPressure Save as Length
3	Length - V1 - 1 Save as V2
4	BloodPressure, Take the First V1 characters, Save as Systolic
5	BloodPressure, Take the Last V2 characters, Save as Diastolic
6	(Systolic - Diastolic) / 3 + Diastolic Save as V3
7	If V3 Is equal to 0 Then Compute Nil Save as V3
8	Set program result to: V3

3rd Party Integration?



3rd Party Integration

The Facts

- 6.x Data Can Be Extracted – Just Like MAGIC!
- 6.x Screens Can Be Scraped – Just Like MAGIC!
- 6.x Routines Can Be Launched – Just Like MAGIC!



DATA EXTRACTION

FOCUS to NPR

The screenshot displays a File Reader application window with a list of records on the left and a detailed structure view on the right. A red circle highlights the first record in the list, and a red arrow points from this record to the structure view. Another red circle highlights a specific field in the structure view, with a red arrow pointing to it from the label 'NPR Structure'.

File Reader Window:

- Address: C:\Program Files\Iatric Systems\10.70.0.153
- File Reader
- Record 1: {NPR|{{WO-20080317132214|846.0003|17888.0002|0}}|D|{20080618.0800|0400|R|+}|B
- Record 2: {NPR|{{WO-20080317132214|846.0008|17865.0001|0}}|D|{20080610.1419|1019|R|+}|B
- Record 3: {NPR|{{WO-20080317132214|846.0005|17865.0002|0}}|D|{20080610.1419|1019|R|+}|B
- Record 4: {NPR|{{WO-20080317132214|846.0011|17863.0003|0}}|D|{20080609.0800|0400|R|+}|B
- Record 5: {NPR|{{WO-20080317132214|846.0004|17863.0001|0}}|D|{20080609.0800|0400|R|+}|B
- Record 6: {NPR|{{WO-20080317132214|846.0011|17670.0011|0}}|+|{20080317.192234|1522|R|+}
- Record 7: {NPR|{{WO-20080317132214|846.0010|17670.0010|0}}|+|{20080317.192234|1522|R|+}
- Record 8: {NPR|{{WO-20080317132214|846.0009|17670.0009|0}}|+|{20080317.192234|1522|R|+}
- Record 9: {NPR|{{WO-20080317132214|846.0008|17670.0008|0}}|+|{20080317.192234|1522|R|+}
- Record 10: {NPR|{{WO-20080317132214|846.0007|17670.0007|0}}|+|{20080317.192234|1522|R|+}
- Record 11: {NPR|{{WO-20080317132214|846.0006|17670.0006|0}}|+|{20080317.192234|1522|R|+}
- Record 12: {NPR|{{WO-20080317132214|846.0005|17670.0005|0}}|+|{20080317.192234|1522|R|+}
- Record 13: {NPR|{{WO-20080317132214|846.0004|17670.0004|0}}|+|{20080317.192234|1522|R|+}
- Record 14: {NPR|{{WO-20080317132214|846.0003|17670.0003|0}}|+|{20080317.192234|1522|R|+}
- Record 15: {NPR|{{WO-20080317132214|846.0002|17670.0002|0}}|+|{20080317.192234|1522|R|+}

Structure: /FSLIST

- ^["FSLIST", "NPR", 0, 1, 0, 1, 8] = +WGHSMRCYWBSU
- ^["FSLIST", "NPR", 0, 1, 0, 1, 9] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 10] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 11] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 12] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 13] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 14] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 15] = +
- ^["FSLIST", "NPR", 0, 1, 0, 1, 16] = +
- ^["FSLIST", "NPR", 0, 1, 1, 0] = +0500000
- ^["FSLIST", "NPR", 0, 1, 1, 1] = +Vital Signs
- ^["FSLIST", "NPR", 0, 1, 2, 0] = +
- ^["FSLIST", "NPR", 1, 0] = +NPR
- ^["FSLIST", "NPR", 1, 1, 0, 0, 0] = +WO-20080317132214
- ^["FSLIST", "NPR", 1, 1, 0, 0, 1] = +846.0003
- ^["FSLIST", "NPR", 1, 1, 0, 0, 2] = +17888.0002
- ^["FSLIST", "NPR", 1, 1, 0, 0, 3] = +0
- ^["FSLIST", "NPR", 1, 1, 0, 1, 0] = +0
- ^["FSLIST", "NPR", 1, 1, 0, 1, 1, 0] = +20080618.0800
- ^["FSLIST", "NPR", 1, 1, 0, 1, 1, 1] = +
- ^["FSLIST", "NPR", 1, 1, 0, 1, 1, 2] = +0400

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Focus "List" Structure

NPR Structure

FOCUS Data from CS NPR Rpt

Client Server Focus Interface - (IAT/IAT.DEV/IAT.DEV) - MEDITECH

Launching NPR Report From Custom Menu

The screenshot displays the Client Server Focus Interface. A custom menu is open, showing a list of applications. The 'Applications' menu is visible on the left, and the 'Main Menu' is visible on the right. The 'Main Menu' contains several options, with 'List PCS Intervention Dictionary from Focus' highlighted in green and circled in red. A red arrow points from the text 'Launching NPR Report From Custom Menu' to the highlighted menu item.

Applications
...
MIS Database
NPR Database
...

Main Menu
Focus Intervention Dictionary
Focus Report
...
List PCS Intervention Dictionary from Focus
...

FOCUS Data from CS NPR Rpt

List PCS Intervention Dictionary from Focus - (IAT/IAT.DEV/IAT.DEV) - MEDITECH


* From Mnemonic
* Thru Mnemonic
* Active

Cancel OK ? ? ? ? ?


FOCUS Data from CS NPR Rpt

Client Server Focus Interface Lookup

Search

Mnemonic	Name
0500000	Vital Signs
0500030	Intake and Output
0500100	Hemodynamic Monitoring
0909090	Collect Specimen
1000060	Alarms on at all times
1250032	Urine Dipstick
2000005	Assess Hydration Status
2250001	Cardiac Assessment
2250002	Monitor/Rhythm Assessment
2250003	Edema Assessment
2250004	Neurovascular/Sensory/Motor Assessment
2300000	Head,Neck,Ears,Eyes & Throat Assessment
2500000	Assess Level of Consciousness 
2500001	Neurological Assessment
2500004	Dysreflexia Assessment
2500007	Assess Deep Tendon Reflexes
2500090	Seizure Assessment/Precautions
2750001	Pain Assessment
2750002	Chest Pain Assessment
2750003	Epidural Assessment

Active
Inactive
Both

Prior Next Cancel 

FOCUS Data from CS NPR Rpt

[PID=24792]List Pcs Intervention Dictionary from Focus - MEDITECH Document Preview

File Help

DATE: 05/15/09 @ 1229 Client Server Focus Interface PAGE 1
USER: MT List Pcs Intervention Dictionary from Focus

Mnemonic	Active	Description	Emr ID
0500000	Y	Vital Signs	
0500010	N	Monitor laboratory values	
0500030	Y	Intake and Output	

Scripting / Screen Scraping

Diet/Meal Daily Totals - Facility: (TEST 6.04) - IATRIC,SYSTEMS

Date: Mon May 18

	Diet Name	Count
Breakfast	Regular	2
	NPO	1
	1200 ADA Diabetic	1
	1800 ADA Diabetic	1
Lunch	Regular	2
Dinner		

Diet name - Regular
Diet count - 2

OK

Selection
Meal Count
Meal Count by Loc

Facility HIM Dept

Diet Name & Count were "scraped" off the screen

Report Writer

REPORT WRITING

Report Writing in 6.x

- There are two report writers (NPR & FOCUS)
- **In FOCUS, terminology has changed**
 - DPMs are now called Objects
 - Segments are now called Records
 - Data elements are now called Fields
- No fragments, macros or *current* ability to use FS code inside computed fields

Report Writing in FOCUS

- Rule Editor / Wizard *may* eliminate need for code
- **Performance comparisons have been interesting**
- All FOCUS application data is available with no special “tricks” needed (e.g. fragments)
- **No current method to allow FOCUS to get NPR data (coming)**
- No NPR to FOCUS report conversion



IMPROVEMENTS

Improvements

- **Built-in audit trails of everything**
- **Improved network performance**
- **Reduced downtime; increased reliability**
- **Data corruption virtually eliminated**
- **Modern screen technology & workflow**

Improvements

- Easier for MEDITECH to support
- **A LOT less “locking” issues in FOCUS**
- The concept of multiple databases is gone



THINKING ABOUT 6.x?

Things to consider...

- Two versions of Client/Server
- **Phased Approach / Multiple Conversions**
- Put in extra effort on report conversion plan!!
- **Understand how much data will be converted**
- Count the cost & decide on best timeframe

Hocus, Pocus! ***Even More About FOCUS!***

For more information:

Please contact your **Iatric Account Manager**
or send an email to **info@iatric.com**



Thank you for attending!