



## Updates!

e-Newsletter by IATRIC Systems, Inc.

### November 2004

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## 1 Messages from Senior Management

### Integration vs. Best-of-Breed: Why not both?

Frank J. Fortner, Senior Vice President - Application Development



If last December, someone were to ask me if the Patriots would win another Super Bowl or the Red Sox would win the World Series, I would have guessed the Red Sox might win – after all, it's been 86 years! Since then, the Patriots did win another Super Bowl and the Red Sox swept away the World Series. From now on, my answer will be – why not both?

Historically, when choosing a hospital information system, the major decision for healthcare facilities has been whether to seek a lower-cost, easier-to-implement solution offered by integrated system vendors vs. the more feature-rich solutions offered by the best-of-breed vendors. We realize most hospitals reading this article chose the path of integration when they purchased their main hospital information system (HIS). Nevertheless, most HIS systems are perpetually expanding by adding new applications, and with each addition it's necessary to weigh the pros and cons of integration vs. best-of-breed.

The decision can be difficult at times. Features of a best-of-breed "cadillac" system may be just what the end-users want, but does the price tag fit within the budget? Conversely, the tight integration aspect of the single vendor solution may be exactly what the I.S. team desires, but will end-user adoption take place given the limited feature set? Is there a happy medium that all parties (including the capital review committee) can agree upon?

Iatric Systems believes a happy medium does exist and over the years, we have sought to make this the cornerstone of our corporate existence. Several third-party software vendors have made this seemingly impossible goal a reality by combining feature-rich, tightly-integrated software with affordable pricing. Positioned somewhere between the single-vendor and best-of-breed solutions, these third-party contributors, utilizing various cutting-edge technologies, are able to offer the kinds of features that rival best-of-breed applications, while offering a level of integration that can only come from in-depth knowledge of the Magic environment. In most cases, these applications are also the most competitively priced in the market. So, yes, like Boston sports fans, at times you can have both!

Iatric Systems sincerely appreciates the business we have received through the years from our many wonderful customers and remains committed to providing the right balance of price, features and MAGIC integration in all of our software and service offerings.

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## 2 You're Invited to a Wedding



Join us as we celebrate the marriage of Patient Discharge Instructions ([PDI](#)) and Physician Discharge Prescriptions ([PDRx](#)). Reduce medication errors, reconcile medications, comply with JCAHO and other regulations, and save physicians and nurses time.

Witness this union for yourself via Webcast at 2:00 pm Eastern on any of the following dates:

[Thu, 11/18](#)

[Tue, 11/30](#)

[Wed, 12/8](#)

[Thu, 12/16](#)

[Tue, 1/4/2005](#)

Webcasts are absolutely free. Please RSVP by clicking on one of the dates above. Include in the message your name, title, the organization you represent, and your phone number. We'll promptly register you for the Webcast and send you logon information. You may also RSVP by e-mailing us at [info@iatric.com](mailto:info@iatric.com) or by phoning us at 978-805-4135.

This marriage is the direct result of customer feedback. You asked, and we listened! Here are some of the enhancements you requested that we've incorporated into the new versions of these products:

- Ability to create predefined prescriptions and instructions
- Lookups for medications, directions and routes when prescribing
- Ability to enter prescriptions in Draft status
- Ability to copy previous prescriptions to a current account and edit as needed
- Ability to electronically sign instructions

We'll look forward to "seeing" you at the wedding!

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### 3 Patient Safety Informatics - Gaining Momentum

One of the hottest topics in healthcare today is patient safety informatics. Many hospitals are currently evaluating and implementing with increasing priority two types of systems. The systems are CPOE (Computerized Physician Order Entry) and BPOA (Bar-coding at Point of Administration) – they help to reduce errors thereby increasing both patient safety and caregiver efficiency.

For all their unique complexities between different software systems, the basic concept is simple. CPOE seeks to catch errors at the point of order entry while BPOA seeks to catch errors at the point of administration. CPOE systems are generally much more expensive and have a much longer implementation period. In addition, if a problem manages to get by the CPOE process, without a BPOA system as a final defense, a patient safety error could still occur. These reasons make bar-coding at the point of administration (and BPOA systems) appear to be the logical first step over CPOE systems. Of course, if Leapfrog and JCAHO have anything to say about it, all hospitals will eventually be required to have both - and frankly, if it increases patient safety, they should!

In July, the industry fully expected JCAHO to mandate the implementation of BPOA systems by Jan 1, 2007 ([see related article](#)). Earlier in the spring, the FDA mandated bar codes on all human drug products, finally paving the way for software vendors to invest time and effort in building more BPOA systems. For several years prior to the FDA mandate, many drug companies would not go through the expense of placing barcodes on all meds due to the lack of BPOA systems, and likewise, software vendors would not invest in developing systems if barcodes weren't available on medications. Drug companies and software vendors stood at the door saying, "after you.... no, after you.... no, really I insist, after you". The FDA ruling settled that by forcing drug companies to take the first step.

JCAHO surprised the industry in their final ruling later in the year by **not** requiring hospitals to implement BPOA systems within that timeframe ([see related article](#)). Many feel that JCAHO may still do so in the future, but the timelines would probably be closer to 2010.

Today, more than ever, the healthcare industry is positioned to leverage the value of patient safety systems which are fast being recognized as an industry "best practice". Keep an eye out in future issues of Updates for additional articles on this topic.

## 4 Capturing Patient E-Signatures



In a recent survey on e-signatures conducted by Iatric Systems, over 25% indicated plans to implement, within the next 18 months, some method of capturing patient signatures electronically. However, less than half of the survey responders indicated having investigated technology available to accomplish this goal. This article provides some foundational information on patient e-signature options, as well as considerations to keep in mind when implementing a patient e-signature solution.

There are basically three types of e-signature options:

1. **Password or PIN** - This method would require the patient to have access to software, using a password or PIN that would enable the patient to definitively mark document(s) as signed.
2. **Digitized Scanned Signature** - This method enables the patient to sign a document using his/her handwritten signature. The signature is either electronically embedded or attached to the necessary document(s). You may be familiar with the digitized e-signature method if you've ever signed a receipt using a "signature pad" at retail stores like Sears or Home Depot.

Iatric Systems' IatriScan software also falls into the digitized scanned signature category. All current processes surrounding the document basically remain the same, with one exception. Once the patient has signed the document, it is scanned into the system quickly and easily, while the hospital staff member is in his/her normal Meditech™ routine. Once the document with signature has been scanned, it is accessible via the Meditech system for anyone with appropriate access, and the patient's signature on the document cannot be altered.

3. **Digital E-Signature** - Digital e-signature ensures a patient's electronic signature is:

- unique to each user
- under the sole control of the signer
- linked to a document in such a way as to prevent tampering
- capable of being authenticated

This method is used extensively in the banking industry. While very robust, digital e-signature solutions can be quite costly.

Here are several things to keep in mind when choosing a patient e-signature solution:

- Will the solution meet E-Sign legislature, JCAHO and HIPAA proposed requirements?
- Will the solution be easy for the patient to use?
- Will the solution provide a printed, signed copy of the document for the patient?
- Will the solution be easy for staff to implement?
- Is there a method (either manual or electronic) for ensuring the identity of the patient?
- Does the solution provide an audit trail?
- Can the signature be altered after it is stored?
- Can the cost of the solution be justified?

We hope you've found this article informative. Please let us know if you would like a list of [e-signature reference materials](#) (information from JCAHO, HIMSS, HIPAA Advisory, etc.).

For more information on how IatriScan can be used in connection with patient e-signatures, visit our website (IatriScan is available in [MAGIC](#) and [Client/Server](#)), or contact us at [info@iatric.com](mailto:info@iatric.com).

## 5 I-Online Learning Winter Schedule

Iatric Systems has class. In fact, we have a number of classes you can "attend" online - in the comfort of your own office. These courses are web-based, interactive, and collectively, they are known as "I-Online Learning." [I-Online Learning](#) is a great way to obtain technical know-how and save your hospital money by eliminating travel expenses.



Our winter I-Online Learning schedule is now available. The name of each course below provides a link to the course dates available, the course description as well as training agendas. Currently, there are four I-Online Learning programs offered throughout the year:

[NUR Interdisciplinary Documentation](#) - This course is designed for those who wish to create interventions which include all disciplines. Level interventions and query links are also reviewed.

[B/AR Proration Rules](#) - This course is designed for anyone who needs to write and/or maintain B/AR proration rules. Basic and more advanced concepts are covered, and post-session exercises are assigned.

[Customer Defined Screen \(CDS\) Attributes](#) - This course is designed for novice and intermediate attribute writers. Some examples of the types of topics covered include defaulting values, skipping queries, calling NPR macros and fragments from queries, and much more.

[Clinical Rules](#) - The basics of clinical rule writing, as well as application-specific content, are covered in this course, which is designed for novice and intermediate level clinical rule writers.

Please e-mail the course Instructor to register for a course. You may also e-mail us at [info@iatric.com](mailto:info@iatric.com) to learn more.

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## 6 NPR Report Writing Tips

### **NPR Tips: Use Multiple Indexes in the Same Report (Magic or C/S)**

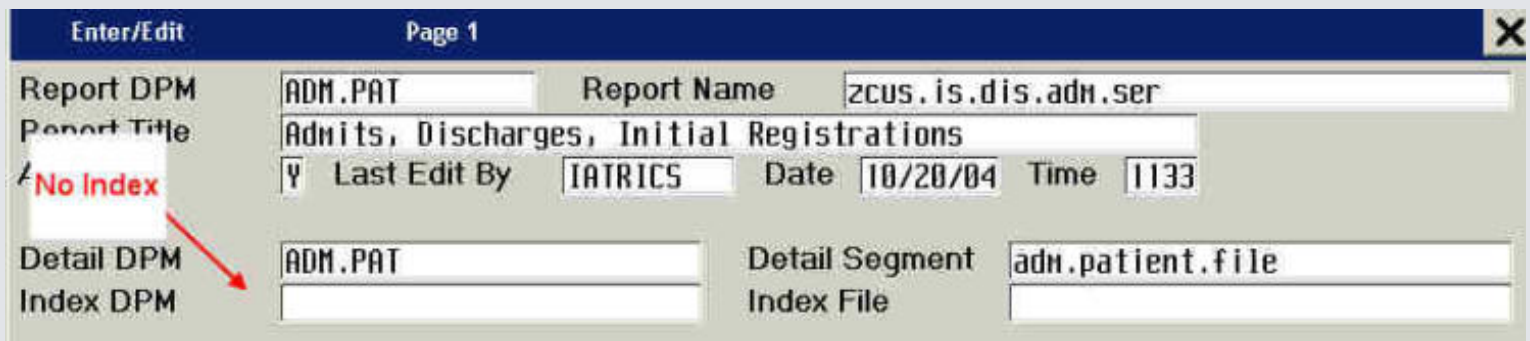
Recently a customer wanted a report that listed Admissions, Discharges and Registrations on the same report for a date range, with only initial registrations included for the RCR patients.

This presents two problems:

- 1) The NPR Report Writer only allows you to use 1 index on a report
- 2) The registration index contains an entry for both an RCR registration and an RCR revisit with no way (via the index) to distinguish the two events.

It would be possible to write one report using the discharge index and then call a fragment which would use the registration index to solve part 1, but that would mean two reports to build and maintain.

Another approach would be to create a report with NO index and process the indexes you need "yourself" in a macro called at the start of the report.



The screenshot shows a software window titled "Enter/Edit Page 1" with a close button (X) in the top right corner. The window contains several input fields for configuring a report:

Report DPM	ADM.PAT	Report Name	zcus.is.dis.adm.ser		
Report Title	Admits, Discharges, Initial Registrations				
<b>No Index</b> (with a red arrow pointing to the Index DPM field)	Y	Last Edit By	IATRICS	Date	10/20/04 Time 1133
Detail DPM	ADM.PAT	Detail Segment	adm.patient.file		
Index DPM		Index File			

Next set up a select against a list you are going to build in the temporary (/) file.

	Select Field/Prompt	Select against a list in temp file	Oper/Default or Keyword
1	urn		LI
	/URN		
2	xx.from		IG
	From Date (Dis/Reg/Adm)		
3	xx.to		IG
	Thru Date (Dis/Reg/Adm)		

Next, write a macro (called "start" in this example report) that you will attach with a footnote:

**Edit Footnotes**

AL START start

Macro at START

In the macro, you loop thru the discharge index to get the discharges, and thru the registration index to get the registrations. For RCR patients, there is an extra trip to the events segment in which you check the events to make sure that the date and time from the reg.index match the event.eff.date and event.eff.time from the "ENREGRCR" transaction in the events.

```

Enter/Edit Macro Logic: ADM.PAT.zcus.is.dis.adm.ser.M.start (A: )
@.facility>facility,
;
;process discharge index,
;
c.xx.from>discharge.date,
@Prev(discharge.date,@discharge.index),
DO{@Next(discharge.date,@discharge.index)'>c.xx.to 1,
DO{@Next(discharge.time,@discharge.index) 1,
DO{@Next(urn,@discharge.index) 1>/URN[urn]}}},
;
;process registration index,
;
DO{@Next(status.type,@adm.reg.index) 1,
c.xx.from>date,
@Prev(date,@adm.reg.index),
DO{@Next(date,@adm.reg.index)'>c.xx.to 1,
DO{@Next(time,@adm.reg.index) 1,
DO{@Next(urn,@adm.reg.index) IF{status.type="RCR" @CHECK.REVISIT;
1>/URN[urn]}}}}},
CHECK.REVISIT
DO{@Next(event.date) 1,
DO{@Next(event.seq.no) 1,
IF{@event.qualifiers="<FIXED>";
@event.code="ENREGRCR";
@event.eff.date=date&(@event.eff.time=time) 1>/URN[urn]}}}}

```

An example report ADM.PAT.zcus.dis.adm.ser, has been placed in both our Magic and C/S NPR Report libraries on our web site.

Please note that our new website has information about our [on-site NPR Report Writer Training](#) and [NPR Report Writing Services](#). You will find additional NPR tips located at <http://www.iatric.com/information/npr-tips.asp>.

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## 7 Subscribing / Contact Us

Subscribe to the **Updates! newsletter** [here](#), or simply visit the lower right hand section of our homepage at [www.IATRIC.com](http://www.IATRIC.com).

You may always reply to this Newsletter with questions or comments. However, if you would like to contact someone directly, please feel free to contact one of the names listed below. You may also be removed from our mailing list by sending us an email request at [INFO@iatric.com](mailto:INFO@iatric.com).

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Physician e-signatures on patient reports

- Patient e-signatures on any type of patient form (consent forms, HIPAA notification, etc.)
- Employee e-signatures on any type of personnel document

'margin:0; text-autospace:none; '> Physician e-signatures on patient reports

- -size: 12.0pt'>