Positive patient ID systems: What’s new, what’s now, what’s next

Karen Wagner

Now that positive patient identification systems are becoming ingrained in the health care arena, marketers of such products are turning their attention to clients’ requests for greater systems compatibility and enhanced functionality.

Users want systems to work with their existing computer systems and with a variety of hardware platforms, say the PPID companies interviewed by CAP TODAY. What’s more, they want features that improve workflow and offer flexibility and convenience. In response, vendors of PPID systems are releasing new products and updated functionality that are more efficient and user friendly.

What users want

“The [PPID] system must complement a hospital’s existing systems and processes, not try to dramatically change them,” says Ralph Moher, vice president of marketing for General Data Company, Cincinnati. If the system is not compatible, hospital staff may expend resources working around this issue, he adds.

“A good example would be if a hospital was using a tethered scanner attached to a COW [computer on wheels] to scan a bar code on the patient’s wristband at the bedside but the COW was not designed to easily fit into some of the rooms,” Moher explains. “In that situation, hospital personnel may leave the COW outside the room, go into the room to look at the patient’s ID number, then go back out to the COW and manually type it in, rather than scanning the bar code on the wristband that has the patient ID number.”

In addition to being able to run on different platforms, PPID systems must meet the needs of various types of users performing similar tasks, says Joseph Stabile, product marketing manager for the Horizon laboratory system of McKesson Corp., San Francisco. “One size does not fit all for all applications,” says Stabile. “The needs of a phlebotomist and a nurse to perform specimen collections may vary in different environments. In a similar fashion, nursing personnel performing a full medication pass and a respiratory therapist administering a treatment that involves medication administration may have different needs.”

Users also want these systems to work in a wireless and wired environment, PPID companies reported to CAP TODAY. For example, some floors within a hospital, or buildings within a hospital campus, may operate in a wireless mode, while others use wired technology. “Your system needs to be able to work seamlessly in that sort of an environment,” says Matthew Lund, director of sales and marketing for Korcheck Technologies, Trumbull, Conn.

Automation, too, is key. Using such tools as scanners, rather than manually entering patient data, improves efficiency and safety. Users also want products that automatically transfer updates of lab orders, times of collection, and other information to various hospital computer systems, including the LIS, says Elinore Craig, manager of marketing communications for Sunquest Information Systems, Tucson.

This automatic update has proven to be a huge timesaver for our customers — allowing them to take containers from a pneumatic tube system or a phlebotomy tray and put them directly on an automated line,” says Craig. “So complete integration with the laboratory information system and producing instrument-ready labels is a key requirement to eliminate relabeling, another step that introduces risk of errors, and to bypass batch processing in the preanalytic area.”

Other sought-after features, Craig continues, are the ability to cancel or reschedule orders that could not be obtained at the requested time and the option to print patient labels for tubes drawn without lab orders.

Medical personnel also want to be able to print labels at the bedside, stresses Theresa McGillvray-Dodd, a member of product marketing for Siemens Healthcare, a division of Siemens Medical Solutions USA, Kenmore, Wash. And they want access to mobile computer devices, she says. Such devices provide the user on the patient care floor with changes or updates to orders immediately, before the employee returns to the lab, McGillvray-Dodd explains.

Reporting capabilities for user productivity and other metrics are important as well, she adds. The ability to track the dates and times of collection, among other data, enhances decisionmaking relative to employee productivity, health care quality, and positive patient outcomes, McGillvray-Dodd says.

With regard to wristbands, users want “ease of use, durability, comfort, and the ability to carry both 2D bar codes as well as a 1D bar code,” says Bob Chadwick, president and owner of Endur ID, Lawrence, Mass.

Two-dimensional bar codes are smaller, more robust, and contain more information, he explains. In addition, two-dimensional bar-code scanners are less susceptible to scanning problems. However, Chadwick says, cost die the Federal Trade Commission’s new identity theft red flag regulations, which require creditors such as hospitals to implement policies or technology to address identity theft.

A few manufacturers, including Korcheck Technologies and Endur ID, plan to release PPID systems for the maternity ward and neonatal intensive care units. Endur ID has also released a PPID system for facilities with less than 100 beds.
such as skilled nursing, rehabilitation, and mental health facilities. “These systems are designed to be affordable, deploy very easily, and provide methods to meet all patient identification needs,” Chadwick says.

What’s next
As PPID systems become more widely accepted, they increasingly will be used to tackle various aspects of medical identity theft, such as insurance fraud, in which patients share insurance cards or providers submit false claims, says HT’s Wiener. In fact, Wiener adds, payers may even require that medical providers show proof of positive patient identification to receive reimbursement. “That’s where it’s going to be a high priority for organizations,” he says.

Biometric identification, such as palm vein authentication, can help prevent such abuse, Wiener continues, because it’s impossible to duplicate or falsify the veins of a palm since such authentication is a face-to-face process.

Sunquest’s Craig asserts that the future of PPID adoption will be driven in part by the pharmacy industry, through an initiative by the American Society of Health-System Pharmacists to improve pharmacy practices in health care systems.

The laboratory is in a position to develop closer working relationships with its pharmacy and nursing peers, Craig says. “Indeed, the laboratory should take a leadership role in selecting and implementing specimen-collection and transfusion solutions to ensure that the laboratory workflow is being considered,” she adds. Craig stresses the need to give “special consideration to the pre-analytic to eliminate relabeling as much as possible and to ensure transfusion information is communicated accurately to the blood bank information system.” The laboratory, she continues, “can bring years of learned lessons in process improvement methodologies, such as Lean and Six Sigma, to the projects, helping to educate and guide their peers.”

The desire to “go green” will also shape the role of PPID systems, Korczech’s Lund says. Moving to a paperless environment drives the need to digitize results such data as a patient’s vital statistics, provider comments, and time elements, for example, which can be done using the type of handheld devices that are often used with PPID systems, he explains.

Perhaps the most powerful influence on the direction and acceptance of PPID systems is the federal government, says McKesson’s Stabile. Providers will have to implement patient safety strategies to be eligible for incentives offered through the American Recovery and Reinvestment Act, he explains. “While every health care organization recognized the need for these solutions, in the past these solutions were ‘nice to have,’” Stabile says. “But as the government strives to remove costs from the health care system, applications that assist organizations in not only creating safer patient processes but also support cost avoidance will continue to become a necessity.”

Karen Wagner is a freelance writer in Forest Lake, Ill.
### Positive patient identification products

<table>
<thead>
<tr>
<th>Component</th>
<th>Cerner</th>
<th>Endur ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of positive patient ID product</td>
<td>Cerner Millennium point-of-care solutions, CareAdmin, CareMobile, Millennium Specimen Collections, RxStation</td>
<td>Endur ID</td>
</tr>
<tr>
<td>Previous name(s) of product</td>
<td>—</td>
<td>IndentifOR, AdministratOR</td>
</tr>
<tr>
<td>Previous marketer(s) of product</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Components of positive patient ID product</td>
<td>software for positive ID of medications, specimen collections, programming of IV smart pumps, integration with automated dispensing devices</td>
<td>software (see also printers/labels/wristbands product guide, page 67)</td>
</tr>
<tr>
<td>Company is a reseller of this product(s)?</td>
<td>sell Cerner products and resell other companies’ products</td>
<td>sell Endur ID products and resell other companies’ products</td>
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<tr>
<td>• For whom is company a reseller?</td>
<td>Honeywell, Motorola, Intermed, IBM, Dell, Zebra Technologies, others</td>
<td>Bio-Optronics, Samsung</td>
</tr>
<tr>
<td>Company sells its products through distribution partners?</td>
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<td>yes</td>
</tr>
<tr>
<td>• With which vendors does company partner?</td>
<td>—</td>
<td>—</td>
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<td>Date of last major product release</td>
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<td>May 2009</td>
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<tr>
<td>Techniques used to read labels on medications</td>
<td>Medication tracking offered via positive patient ID product</td>
<td>—</td>
</tr>
<tr>
<td>• Techniques used to read labels on medications</td>
<td>order for medication, history of allergies, route of administration, intended recipient, correct dosage, rate of administration</td>
<td>order for medication, history of allergies, route of administration, intended recipient, correct dosage, rate of administration</td>
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<td>Handheld workstations</td>
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<tr>
<td>• How handheld workstation communicates with host LIS</td>
<td>local area wireless (802.11a, 802.11b, 802.11g)</td>
<td>general-purpose PC, pocket PC, mobile tablet PC</td>
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<td>• Systems that ID-matching software runs on</td>
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<td>Data elements encoded on specimen label</td>
<td>bar-code label printed centrally and added to tube, bar-code label printed at bedside and applied to tube, container ID, specimen type, patient name, tube type, collector ID, patient location, date, tests ordered, patient account/admission No., patient medical record No.</td>
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<td>Medication tracking offered via positive patient ID product</td>
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<td>• Techniques used to read labels on medications</td>
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<td>order for medication, history of allergies, route of administration, intended recipient, correct dosage, rate of administration, one-dimensional bar code, two-dimensional bar code</td>
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<td>general-purpose PC, pocket PC, mobile tablet PC</td>
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<tr>
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<tr>
<td>Data elements encoded on specimen label</td>
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### Note
A dash in lieu of an answer means company did not answer question or question is not applicable.
Positive patient identification products

Part 3 of 7

See survey of printers/labels/wristbands for positive patient ID, page 57

Name of positive patient ID product

• Previous name(s) of product
  • Previous marker(s) of product

Components of positive patient ID product

• Information system interface depends on platform and customizations depends on LIS vendor
  • Single handheld workstation
    — depends on hardware

Cost

Hospital and/or laboratory information system interface(s)

| Siemens, McKesson, Meditech, GE Healthcare, homegrown HISs | Meditech, other LISs via HL7 or custom interfaces |

Name of positive patient ID product

• PatientSecure
  • Mobila

Components of positive patient ID product

• Biometric authentication system
  • Software for handheld devices and PCs, including mobile laptops on carts

Company is a reseller of this product(s)?

• No

Company sells its products through distribution partners?

• No

First ever/most recent installation of positive patient ID product

<table>
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<th>July 2007/April 2009</th>
<th>November 2004/April 2009</th>
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<tr>
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<td>No. of facilities where product is installed and operational</td>
<td>~200</td>
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Techniques to verify patient ID when creating a wristband on admission

• Hand veins
  • Biometric
  • One-dimensional bar-code wristband, two-dimensional bar-code wristband, manual entry of ID No. from wristband

Techniques for patient ID prior to each intervention/specimen collection

• How RFID tag is affixed to patient
  • Approximate dimensions of RFID tag
  • Data fields on RFID tag or wristband
  • Type of biometric application
  • Safeguards for manual entry of ID No.
  • Manual entry not an option
  • ID No. clearly distinguishable in database; can prevent manual entry of ID No.

Product functionality

• General laboratory specimen collection, patient and medication matching
  • Prior to medication administration, bedside point-of-care testing, IV pump programming, patient and blood unit matching prior to blood transfusion, DIC reporting, nursing data collection, breast milk matching

Data elements encoded on specimen label

• Accession No., container ID, specimen type, patient name, tube type, collector ID, patient location, date, tests ordered, patient account/medical record No.

Bedside technology for blood transfusion offered via positive patient ID product

• Symbology that product accepts for bedside transfusion
  • Techniques for reading labels on blood units
  • Manual entry of patient ID permitted for matching blood units for transfusion

Medication tracking offered via positive patient ID product

• Intended recipient
  • Techniques used to read labels on medications

Handheld workstations

• Approximate size of handheld/point-of-care workstation
  • Approximate weight of handheld/point-of-care workstation
  • How handheld workstation communicates with host LIS
  • Systems that ID-matching software runs on

FDA 510(k) approval

• FDA 510(k) approval
  • To positive patient ID product FDA 510(k) approved?
  • Have applied for, but not yet received, FDA 510(k) approval?
  • Intend to apply for FDA 510(k) approval?

Hospital and/or laboratory information system interface(s)

| Siemens, McKesson, Meditech, GE Healthcare, homegrown HISs | Meditech, other LISs via HL7 or custom interfaces |

Cost

• General license fee per facility
  • Single handheld workstation
  • Information system interface
    • Utilizes Fujitsu PalmSecure, which reads vein information from the palm without direct contact with the skin
    • Integrates with all HIS platforms and crosses all platforms; operates like a biometric enterprise master patient index (EMPI) system
    • Helps prevent medical identity theft, medical insurance card sharing, duplicate medical record Nos., and MPI/EMR mismatches; speeds the registration/admissions process
    • Utilizes Fujitsu PalmSecure, which reads vein information from the palm without direct contact with the skin
    • Integrates with all HIS platforms and crosses all platforms; operates like a biometric enterprise master patient index (EMPI) system
    • Helps prevent medical identity theft, medical insurance card sharing, duplicate medical record Nos., and MPI/EMR mismatches; speeds the registration/admissions process

Distinguishing features (supplied by vendor)

• Ranked No. 1 in the KLAS specimen collection bar coding category for the third year in a row
• Supports multiple hardware platforms, including such handheld devices as the Symbol PPT 8846, as well as any PC workstation, including laptops and computers on wheels (COWs)
• Suite of management reports includes turnaround time, workload, user activity detail, and specimen-management reports, providing supervisory tools to monitor and proactively manage phlebotomy processes

Note: a dash in lieu of an answer means company did not answer question or question is not applicable

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Positive patient identification products

Part 4 of 7

Korchek Technologies
Gregory Francis
115 Technology Drive, Suite 8206
Trumbull, CT 06611
203-452-8285
www.korchek.com

Lattice
Pat Heniff
1731 Naperville Rd.
Wheaton, IL 60187
630-949-3250
www.lattice.com

See survey of printers/labels/wristbands for positive patient ID, page 67

Name of positive patient ID product
CareChek

MediCopia

Components of positive patient ID product
Workstations, handhelds, HL7 interface (see also printers/labels/wristbands product guide, page 67)

Handheld computers, bedside specimen-collection software (see also printers/labels/wristbands product guide, page 67)

Company is a reseller of this product(s)?
no

sell Lattice products and resell other companies’ products

Company sells its products through distribution partners?
yes

no

With which vendors does company partner?
Digi-Trax

Company sells its products through distribution partners?
Intermec, Motorola, Zebra Technologies

For whom is company a reseller?
Intermec, Motorola, Zebra Technologies

Components of positive patient ID product

Techniques used to read labels on medications
one-dimensional bar-code wristband, two-dimensional bar-code wristband, manual entry of ID No. from wristband

ID card, patient photo on wristband, one-dimensional bar-code wristband, two-dimensional bar-code wristband, passive RFID, ADT-Census Check

Approach dimensions of RFID tag

—

—

Data fields on RFID tag or wristband
medical record No.

—

—

Type of biometric application
—

—

Safeguards for manual entry of ID No.
double-blind manual entry

manual entry not an option

First ever/most recent installation of positive patient ID product
2004/May 2009

1996/February 2009

Date of last major product release
May 2009

November 2008

No. of contracts for U.S. sites where product is installed and operational
1

92

No. of contracts for foreign sites where product is installed and operational
0

0

No. of facilities where product is installed and operational
1

78

Techniques to verify patient ID when creating a wristband on admission
date

bar code

Techniques for patient ID prior to each intervention/specimen collection
one-dimensional bar-code wristband

ID card, patient photo on wristband

Techniques for patient ID prior to each intervention/specimen collection

• How RFID tag is affixed to patient
—

—

• Approximate dimensions of RFID tag
—

—

• Data fields on RFID tag or wristband
—

—

• Approximate size of handheld/point-of-care workstation
—

6.25 x 3.25 in.

• Intend to apply for FDA 510(k) approval?
—

unnecessary

• Systems that ID-matching software runs on
general-purpose PC, mobile tablet PC

general-purpose PC, pocket PC, Palm handheld, mobile tablet PC

FDA 510(k) approval

with

unnecessary

Healthy and Social Care Laboratory Information Systems

Hospital and/or laboratory information system interface(s)

—

Cerner, Meditech, McKesson, Sunquest, SCC Soft Computer, GE Healthcare, homegrown

Cost

• General license fee per facility
—

—

• Single handheld workstation
varies

—

• Information system interface
included

—

Distinguishing features (supplied by vendor)
distinguishing features not provided

• ease of use

• unique feature set

• custom design flexibility

Note: a dash in lieu of an answer means company did not answer question or question is not applicable

Tabulation does not represent an endorsement by the College of American Pathologists.
### Positive patient identification products

<table>
<thead>
<tr>
<th>Part 5 of 7</th>
<th>McKesson</th>
<th>McKesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>See survey of printers/labels/wristbands for positive patient ID, page 67</td>
<td>Kerry Bruning <a href="mailto:kerry.bruning@mckesson.com">kerry.bruning@mckesson.com</a> 5995 Windward Parkway Alpharetta, GA 30005 515-992-3166 <a href="http://www.mckesson.com/laboratory">www.mckesson.com/laboratory</a></td>
<td>Joseph R. Stabile <a href="mailto:joseph.stabile@mckesson.com">joseph.stabile@mckesson.com</a> 5995 Windward Parkway Alpharetta, GA 30005 404-338-4363 <a href="http://www.mckesson.com/laboratory">www.mckesson.com/laboratory</a></td>
</tr>
</tbody>
</table>

### Name of positive patient ID product
- Horizon Admin-Rx
- Horizon MobileCare Phlebotomy

### Components of positive patient ID product
- Software to support positive patient identification and five rights of medication administration
- Software to support positive patient identification for specimen collection, handheld devices, portable bar-code printers

### Company is a reseller of this product(s)?
- McKesson products and resell other companies’ products
- McKesson products and resell other companies’ products

### Company sells its products through distribution partners?
- Motorola, Zebra Technologies
- Motorola, Zebra Technologies

### First ever/most recent installation of positive patient ID product
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<th>1988/March 2009</th>
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<td>0</td>
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</table>

### Techniques to verify patient ID when creating a wristband on admission
- one-dimensional bar-code wristband, two-dimensional bar-code wristband

### Techniques for specimen identification at time of specimen collection
- bar-code label printed centrally and added to tube, bar-code label printed at bedside and applied to tube

### Data elements encoded on specimen label
- accession No., container ID, specimen type, patient name, patient location, date, tests ordered, patient account/admission No., tube type, collector ID, patient medical record No., others

### Medication tracking offered via positive patient ID product
- order for medication, history of allergies, route of administration, intended recipient, correct dosage, rate of administration
- order for medication, history of allergies, route of administration, intended recipient, correct dosage, rate of administration

### Medication tracking offered via positive patient ID product
- one-dimensional bar code, two-dimensional bar code
- one-dimensional bar code, two-dimensional bar code

### Handheld workstations
- 6 x 3.1 x 1.5 in.
- 6 x 3.1 x 1.5 in.
- 12 oz.
- 12 oz.
- 12 oz.
- 12 oz.
- local area wireless (Tri-mode IEEE 802.11a, 802.11b, 802.11g)
- local area wireless (Tri-mode IEEE 802.11a, 802.11b, 802.11g)
- general-purpose PC, pocket PC, mobile tablet PC
- general-purpose PC, pocket PC on the Symbol 8846 and Motorola MC70 devices, mobile tablet PC

### FDA 510(k) approval
- unnecessary
- unnecessary
- no
- no

### Hospital and/or laboratory information system interface(s)
- McKesson, Sunquest, Cerner, SCC Soft Computer, Meditech
- add-on module to McKesson Horizon Lab (no interface required)

### Cost
- $1,700/unit integrated with Horizon Lab LIS (no additional cost)
- $1,700/unit integrated with Horizon Lab LIS (no additional cost)

### Distinguishing features (supplied by vendor)
- complete integration with enterprise clinical information system
- co-exists with McKesson’s solution for medication administration, Horizon Admin-Rx, on the same handheld device

### Note: a dash in lieu of an answer means company did not answer question or question is not applicable
### Positive patient identification products

#### Part 6 of 7

**See survey of printers/labels/wristbands for positive patient ID, page 67**

<table>
<thead>
<tr>
<th>Name of positive patient ID product</th>
<th>NicLabel Enterprise series, LabelClinic</th>
<th>Siemens Patient Identification Check</th>
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</thead>
<tbody>
<tr>
<td><strong>Previous name(s) of product</strong></td>
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<td>BD.id Patient Identification System</td>
</tr>
<tr>
<td><strong>Previous marketer(s) of product</strong></td>
<td>---</td>
<td>Becton, Dickinson and Company</td>
</tr>
</tbody>
</table>

**Components of positive patient ID product**

- executes a software, handheld device, PC cart on wheels (see also printers/labels/wristbands product guide, page 67)

**Company is a reseller of this product(s)?**

- **For whom is company a reseller?**
  - Cerner, Wyndgate, Leica Microsystems, Computype, General Data
  - Company, Ingram Micro

**First ever/most recent installation of positive patient ID product**

<table>
<thead>
<tr>
<th>Date of last major product release</th>
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<tr>
<td>No. of contracts for U.S. sites where product is installed and operational</td>
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<td>No. of contracts signed since May 1, 2008</td>
<td>200+</td>
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<tr>
<td>No. of facilities where product is installed and operational</td>
<td>1,000+</td>
<td>6</td>
</tr>
</tbody>
</table>

**Techniques to verify patient ID when creating a wristband on admission**

<table>
<thead>
<tr>
<th>Techniques for patient ID prior to each intervention/specimen collection</th>
<th>ID card without a photograph, ID card with a photograph, bar code</th>
<th>bar code</th>
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<tbody>
<tr>
<td><strong>How RFID tag is affixed to patient</strong></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Approximate dimensions of RFID tag</strong></td>
<td>---</td>
<td>---</td>
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<tr>
<td><strong>Data fields on RFID tag or wristband</strong></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Type of biometric application</strong></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Safeguards for manual entry of ID No.</strong></td>
<td>manual entry not an option</td>
<td>ID No. clearly distinguishable in database; can prevent manual entry of ID No.</td>
</tr>
</tbody>
</table>

**Product functionality**

- general laboratory specimen collection, patient and blood unit matching prior to blood transfusion, temp ID function

**Techniques for specimen identification at time of specimen collection**

| Data elements encoded on specimen label                                 | bar-code label printed centrally and added to tube, bar-code label placed on tube in tube manufacturing process, radio-frequency tag created centrally and added to tube, bar-code label printed at bedside and applied to tube, peel-off label removed from wristband, radio-frequency tag created at bedside and applied to tube accession No., patient ID, specimen type, patient name, tube type, collector ID, patient location, date, tests ordered, patient account/admission No., patient medical record No., others
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Bar-code label</strong></td>
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<td>---</td>
</tr>
<tr>
<td><strong>Radio-frequency tag</strong></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Wristband</strong></td>
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<td>---</td>
</tr>
</tbody>
</table>

**Bedside technology for blood transfusion offered via positive patient ID product**

| **Symbology that product accepts for bedside transfusion**              | Codabar, ISBT 128                                                | ---       |
| **Techniques for reading labels on blood units**                       | ---                                                               | one-dimensional bar code                                       |
| **Manual entry of patient ID permitted for matching blood units for transfusion** | ---                                                               | yes       |

**Medication tracking offered via positive patient ID product**

| **Devices and/or software**                                            | ---                                                               | ---       |
| **Techniques used to read labels on medications**                      | ---                                                               | ---       |

**Handheld workstations**

- **Approximate size of handheld/point-of-care workstation**
  - 11.2 oz.

**FDA 510(k) approval**

- **Is positive patient ID product FDA 510(k) approved?** unnecessary
- **Have applied for, but not yet received, FDA 510(k) approval?** unnecessary
- **Intent to apply for FDA 510(k) approval?** ---

**Hospital and/or laboratory information system interface(s)**

| Cerner, Sunquest, Wyndgate, Mediware, configurable HL7 interface | Siemens, McKesson, Meditech, Cerner, Sunquest |

**Cost**

- **General license fee per facility** $4,000+
- **Single handheld workstation**
- **Information system interface**

**Distinguishing features (supplied by vendor)**

- configurable HL7 interface allows any HIS/LIS data to be printed into a bar code
- printer-agnostic so facility can output to any thermal or laser printer
- flexible document design allows facility to make changes to printed documents independent of vendor

Note: a dash in lieu of an answer means company did not answer question or question is not applicable.

Tabulation does not represent an endorsement by the College of American Pathologists.
For positive patient ID, success comes at last

Raymond Aller, MD

If the history of how positive patient identification systems have come to be accepted in the practice of health care were reflected in a song title, “The Long and Winding Road,” by the Beatles, it would be apropos.

The medical profession began talking up positive patient identification in the 1980s, and several companies introduced such products in the early 1990s. Yet, despite the benefits afforded by such tools, few labs purchased these solutions, and one vendor let its bedside positive ID product lapse in anticipation of Y2K.

So why, when positive patient ID clearly benefits patient safety, has it taken decades to mainstream these products into health care institutions?

• The narrow focus. Software from the 1980s and 1990s was heavily focused on the internal operation of the entity being served by that product. Therefore, pharmacy operations focused solely on pharmacy operations and laboratory systems solely on lab operations.

• To err is human: Building a Safer Health System,” most institutions did not give budgetary priority to patient safety considerations. The mindset: Why spend $500,000 on a complex, multiparadigm interlocked system to solve a problem we don’t have when we can spend the same amount on a new radiology scanner or laboratory instrument that will generate an immediate revenue stream?

• Less-than-cutting-edge technology. The hardware and software available in the late 1980s was less reliable and more costly than the tools available today. Error-free scanning of bar-coded wristbands was not a given. Wireless communication was nonstandardized and erratic. The thought of connecting a positive patient ID system to a legacy information system could be overwhelming.

• The chicken-or-the-egg theory. Laboratories and other hospital departments didn’t use bar code coding routinely until this century because patient wristbands didn’t have bar codes, because that would take a hospitalwide initiative via the admitting office. Admitting offices didn’t budget for adding bar codes to wristbands because hospital departments did not have tools that could read them. Nor were admitting offices inclined to ask for funds for a technology that appeared to be of greater benefit to other hospital departments and therefore should be covered by their budgets.

• Blaming the other guy. An impediment to pharmacy’s use of bar coding in the past was that no medications came in a bar-coded unit-dose package. Unlike in general retail and other marketplaces, there was no giant health care provider requiring suppliers to provide bar coding as a condition of doing business.

• Good manners before safety. A prevailing thought many years ago was that bar codes are too impersonal—it’s better to be polite and ask the patient for his or her name. This despite the fact that many a patient has answered yes when asked if she is Mrs. Jones, and ask the patient for his or her name. This despite the fact that many a patient has answered yes when asked if she is Mrs. Jones, even though she is Mrs. Adams.

If history is a timeless teacher, then those unnamed cutting-edge health care technologies yet to come should benefit from the lessons provided by the adoption of positive patient identification systems.

Dr. Aller is director of automated disease surveillance and team lead for disaster preparedness Focus B, Los Angeles County Department of Public Health. He can be reached at raller@ph.lacounty.gov.

Dr. Aller wishes to thank Karen Longe, president of Karen Longe and Associates, Lake Bluff, Ill., and formerly of the American Hospital Association, for her contributions to this article. As program manager at the AHA, Longe was instrumental in introducing the concept of bar coding into positive patient identification.

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<table>
<thead>
<tr>
<th>Company contact information</th>
<th>Product(s) for positive patient ID</th>
<th>Year company entered market</th>
<th>Printers/reseller?</th>
<th>Labels/reseller?</th>
<th>Wristband/reseller?</th>
<th>Percentage of customer base in U.S.</th>
<th>Distinguishing characteristics of printers, labels, wristbands</th>
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<td>AMT Datassouth Corp.</td>
<td>printers, labels, and wristbands</td>
<td>1990</td>
<td>no</td>
<td>no</td>
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<td>AMT Datassouth</td>
<td>Precision Dynamics</td>
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</table>

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