Time Study Finds Efficiency Benefit with Paceart and HL7 Connectivity

A recent study found an up to 9-minute per patient time savings in clinic workflow processes when using a Paceart System that was integrated with a clinic’s electronic health record (EHR).

The study measured the time it took to complete a variety of device clinic workflow processes, comparing the use of a Paceart System that is integrated with an EHR system to the use of a stand-alone Paceart System that is not integrated with an EHR and relies on manual entry. The study was conducted at The Ohio Heart & Vascular Center in Cincinnati, Ohio in October 2008.

Note: The results documented in this case are unique to this clinic. Not every clinic experiences the same results. Your results may vary.

Observers Monitored
- Scheduling of a patient
- Capturing new patient demographic information
- Interrogation of the patient’s device
- Syncing of information and documentation in Paceart
- Interfacing of information to and the review of information in the EHR

The results showed that, in the areas of scheduling and new patient demographic and clinical data entry, Paceart Connectivity saved approximately 9 minutes per patient for the patients observed.

The Study Found the Use of Paceart Connectivity Resulted in
- Immediate and seamless data flow to the global EHR
- A reduction in the scanning of information and easier review of data in discrete data fields versus a single scanned image, facilitating faster access to patient data
- The ability to easily report on key data both internally and externally
- Immediate completion of billing
- A reduction in paper and printing of information for review

Findings
The integration of Paceart with the EHR optimizes efficiency in the workflow, resulting in an up to 9-minute per patient time savings in clinic workflow processes.

<table>
<thead>
<tr>
<th>Workflow Components</th>
<th>Time Savings with Paceart Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling Information</td>
<td>1.04 minutes</td>
</tr>
<tr>
<td>New Patient Demographic Information</td>
<td>0.70 minutes</td>
</tr>
<tr>
<td>Clinical Data</td>
<td>0.33 minutes</td>
</tr>
<tr>
<td>Total</td>
<td>2.07 minutes</td>
</tr>
</tbody>
</table>

Time Savings of approximately 9 minutes per patient with Paceart Connectivity for the patients observed at The Ohio Heart & Vascular Center.

There was an increase in workflow efficiency when Paceart was integrated in the EHR.

Time Saved per Task with Paceart Integration

<table>
<thead>
<tr>
<th>Entry of</th>
<th>Paceart Integrated with EHR</th>
<th>Manual Entry to EHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling information</td>
<td>1.04 minutes</td>
<td>1.30 minutes</td>
</tr>
<tr>
<td>New patient demographic information</td>
<td>0.70 minutes</td>
<td>2.73 minutes</td>
</tr>
<tr>
<td>Clinical data</td>
<td>0.33 minutes</td>
<td>7.17 minutes</td>
</tr>
</tbody>
</table>

Potential Total Time Saved by Number of Patients

<table>
<thead>
<tr>
<th>Number of Patients Seen</th>
<th>Time to Complete Manual Data Entry to EHR (minutes)</th>
<th>Time to Complete Data Entry using Paceart Integrated with EHR (minutes)</th>
<th>Time Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11.20</td>
<td>2.07</td>
<td>9.13 minutes</td>
</tr>
<tr>
<td>10</td>
<td>112</td>
<td>20.70</td>
<td>91.30 minutes</td>
</tr>
<tr>
<td>25</td>
<td>280</td>
<td>51.75</td>
<td>228.25 minutes (3 hours and 48 minutes)</td>
</tr>
</tbody>
</table>
Conclusion

Continual advances in healthcare technology guarantee that new applications and interfaces will be rolled out regularly. Keeping pace in this environment makes interoperability a necessity. Many healthcare executives regard comprehensive acquisition and integration of clinical data as critical to remaining competitive and moving to the next level of care.²

Connecting implanted cardiac device data to the EHR and into the PHR via a single, easily managed interface can help healthcare practices achieve these goals. Paceart is the only device follow-up system on the market that integrates demographics, scheduling, and cardiac device data all in one place – providing a single solution for all cardiac device data and unmatched EHR coverage.

References
1 Paceart System and EHR Integration, conducted by Validus Consulting, Inc. at The Ohio Heart & Vascular Center, Cincinnati, Ohio, October 2008.

Brief Statement
Paceart®
For further information regarding Paceart, please call Medtronic at 1 (800) 722-3278 and/or consult Medtronic’s website at www.paceart.com.

The Medtronic CareLink® Programmer
The CareLink® Programmer is a portable, microprocessor-based instrument used to program Medtronic and Vitatron implantable devices.

CareLink Monitor/CareLink Network
The CareLink Monitor and the CareLink Network are indicated for use in the transfer of patient data from some Medtronic implantable cardiac devices based on physician instructions and as described in the product manual. These products are not a substitute for appropriate medical attention in the event of an emergency and should only be used as directed by a physician. Do not use a cellular phone while the antenna is positioned over the implanted device. The CareLink Network is currently available in the continental United States, Alaska, and Hawaii.

See the device manuals for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1 (800) 328-2518 and/or consult Medtronic’s website at medtronic.com.

Caution: Federal law (USA) restricts these devices to sale by or on the order of a physician.