Improving Patient Compliance with Remote Monitoring
A Study of Pacemaker Patients with Transmitters Paired at the Point of Care

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Background
Remote follow-up offers a safe, effective, convenient and cost-effective alternative to some office visits for pacemaker patients, but its utility is limited by patient non-compliance.

- Once set up, wireless systems require no further patient action, helping patients remain compliant.
- Low compliance is an industry challenge, with published compliance rates of 55% in the CONNECT1 study and 51% in a study by Cleveland Clinic2.

Compliance Matters: Industry Snapshot
- 45% of automatic clinical alerts are not successfully transmitted because the home monitor is not properly set up by the patient1.
- Poor compliance creates workflow inefficiencies2.

Study Question3
- Does “point of care pairing” of transmitters improve patient compliance with remote monitoring?
- Comparison to the conventional approach where the transmitter arrives in the mail 7 to 10 days post-implant and requires the patient to set it up.

Methods3
- 202 consecutive patients with Accent™ RF devices were divided into an In-Office group that had the wireless transmitter paired at the first post-implant office visit (point of care pairing) and a Home group who received the transmitter in the mail (7-10 days post-implant) and had to set it up themselves.
- Primary endpoint was adherence, defined as at least one successful wireless transmission within 2 months after implant.
- Chi-square test was used for statistical analysis.

Results3
- Demographics of patients at baseline were similar between groups.
- Adherence, or compliance, was 91% for In-Office group patients compared to 22% for Home patients (p<0.0001).
- In the study 21 patients had a history of stroke. Of this subgroup, 8/12 from the In-Office group were adherent versus 0/9 in the Home group (67% vs. 0, p=0.002).

| Successful transmission rates for Home vs. In-Office groups. |
|---|---|---|---|---|---|---|---|
|            | 0% | 20% | 40% | 60% | 80% | 100% |
| Home       | 22%|     |     |     |     |     |
| In-Office  | 91%|     |     |     |     |     |

Patient Transmitter Compliance: Study Comparison

| Successful transmission rates for CONNT trial vs. Cronin et al vs. Point of Care Pairing. |
|---|---|---|---|---|---|---|---|
|            | 0% | 20% | 40% | 60% | 80% | 100% |
| CONNT Trial| 55%|     |     |     |     |     |
| Cronin et al| 51%|     |     |     |     |     |
| Point of Care Pairing| 91%|     |     |     |     |     |

Adding Value Through Remote Monitoring
- Remote monitoring may improve outcomes, streamline reimbursement issues, and can help health care organizations avoid costs4, 5.
- The key variables to the value of remote monitoring are patient compliance and RF devices that enable daily monitoring.
- Automatic alerts for atrial tachycardia and atrial fibrillation (AT/AF) are important tools for managing the increased risk of stroke among pacemaker patients6.
Merlin@home™ Transmitter
- Complement or replace in-clinic visits with remote transmissions to monitor patients’ disease status and device performance
- Works with a landline, cellular adapter, or broadband internet connection to provide more patients with access to remote care

Point of Care Pairing
- Enables patients to activate daily remote monitoring from the first day they leave the hospital
- Physicians set the expectation that patients will use remote monitoring
- Education and a simple plug-and-play system gives patients and their loved ones the confidence to set up the new equipment

Conclusion
Patient adherence to remote follow-up and monitoring can be significantly increased with “point of care” pairing compared to the conventional approach of sending a transmitter and instructions for set-up in the mail 7 to 10 days after implantation (91% vs. 22%, p<0.0001). Point of Care pairing and wireless devices help improve patient transmitter compliance.

"In-office setup of the wireless transmitter is associated with significantly superior patient compliance, which is the key to remotely managing patients with implantable cardiac devices for improved outcomes.”

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