

Clinician Perspectives on Risks and Benefits of Sharing Cardiovascular Implanted Electronic Device (CIED) Data with Patients

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Background and Objective: Cardiovascular implantable electronic devices (CIEDs) are critical, life-saving devices that are essential for the clinical decision-making process due to the data they collect. Because not all patients have ready access to their device data, there may be a clinical care gap where the CIED data are not being used most effectively in the care of patients with CIEDs. However, sharing CIED data may risk harming clinician-patient relationships and necessitates further study into clinician's perspectives on CIED data sharing. The objective of this study was to explore clinicians' perspectives on sharing CIED data with their patients and explore the perceived benefits and concerns.

Methods: Clinicians involved in CIED care in the United States were recruited for semi-structured phone interviews. Participants were asked questions regarding their experiences and perspectives in sharing CIED data, and were presented scenarios to assess how they would leverage the CIED data in particular situations. Responses from the participants were analyzed by one researcher using thematic analysis.

Results: Of the 28 clinicians interviewed in this study, the majority were white (85.7%) and located in the midwestern United States (67.9%). Participants included cardiac device clinic nurses and electrophysiology nurses (28.6%), electrophysiologists (25%), electrophysiology advanced practice providers (APPs) (17.9%), cardiologists (14.3%), and cardiology APPs (14.3%). The following themes were identified: (1) Patient engagement with healthcare, (2) Patient self-advocacy, (3) Patients cannot interpret CIED data, (4) One size does not fit all.

Conclusion and Potential Impact: Clinicians perceived both potential benefits and harms from CIED data sharing. Clinicians noted that CIED data sharing has the potential to increase patient participation in their healthcare, but it also can cause increased patient anxiety due to insufficient patient education. This study demonstrated some of the ways CIED data sharing may affect clinical practice involving CIEDs and the challenge of sharing complex data elements with patients.