Secondary Uses of Health Data IMPAC's Oncology Data Alliance Program

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IMPAC Medical Systems, Inc.

- Est. 1990.
- Elekta Company
- Provides healthcare IT solutions that streamline clinical and business operations across the spectrum of cancer care
- Core product is an oncology-specific Electronic Medical Record (EMR) system
 - Includes substantial reporting capabilities
 - Numerous interfaces to external HIS, billing, device, cancer registry, other resources...
 - Patient safety, practice administration, data management all components of system



Oncology Data Alliance (ODA) QA Program

Overview

- Quality assurance initiative, est. 2005
- Increase physician use of EMR
- Help customers prepare for pay for performance
- Leverage oncology practice community
- Leverage data aggregate byproduct
- Program is optional; \$0 cost to IMPAC EMR customers



ODA Program Description

- Consortium of customers primarily using Med Oncology product
- Implementation combines software with customer training/support
 - Train customer in best data entry practices
 - Software => limited data set electronically transferred monthly to update the aggregate
 - IMPAC creates de-identified aggregate of customers' EMR data
 - Feedback to customers and IMPAC



Data Composition

- Subset of Medical Oncology (MO) and Radiation Oncology (RO) variables
 - Basic patient demographics
 - Diagnostic information
 - Laboratory data
 - Drug and radiation utilization



Data De-identification

- No names, city or state, zip codes, or staff names are collected.
- Select Treatment dates are collected
 - Shifted by a set interval each time aggregate is created in order to further de-identify
 - Enables interval between treatment times to remain accurate, while hiding actual dates
- DOB is used to calculate age only and is not recorded in the aggregate



ODA Customer Benefits

- Quality reports that disclose "missing data" elements per patient
- Access to a secure website to access aggregate de-identified data
 - Analyze using IMPAC's data analysis tools
 - Benchmark their site alone or in comparison to other de-identified facilities and aggregate



Data Partners

- IMPAC provides de-identified data aggregate to external commercial partners
 - Consulting and healthcare research firms
 - Have significant interest in real-time patterns of care
- Program members fully participate in this partnership



HIPAA-related Considerations

- Program created as vehicle to collect, aggregate, and de-identify oncology data
- IMPAC: Learns how to improve product to better support customers/patients
- Customers: QA comparisons against aggregated baselines
- Customers: Access to other data quality reports and trends
- Participation in program permissible disclosure of data to IMPAC as a covered entity health care operation.



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IMPAC Regulatory Affairs Department

- Dedicated department that oversees and ensure all data aggregation and transfer processes are HIPAA... compliant
 - Compliance processes
 - Audits of processes
 - Assures proper management of legacy data including data protection, user audits, and intended data destruction



Future Plans

- "Open the faucet"
 - Enhancing the interface from the EMR to the ODA
 - Enhancing the interface from the EMR to Registry
- Improving data quality
 - Real-time feed back
 - Facility real-time reporting
- Evolve to Cancer Registry
 - Cancer registry system of future should approach real-time



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