Patient Consent Management

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Admin

- Create Patient user account
- Create Doctor user account

Patient

- Create consent
 - Template to share data with other physician/provider
 - Template to share data for research activities
 - Emergency situation
- View request history
- Set alerts to get notification on consent enquiry
- Setup proxy

Doctor

- Can act as proxy to set consent for a patient
- Request consent information for a patient to view records
- Show the data as per consent
- Treat patient, enter electronic health record

Risk Analysis

- Comply with HIPAA requirements
- Identify critical assets (PHI, user accounts, keys, consents)
- Data security on network
- Protect information from different vulnerabilities as mentioned in OWASP

Data Priority

- Keys
- User Accounts
- PHI
- Consents

Security Design Attributes

- Mutual Trust through Kerberos
- Session Management
- Authorization
- Password Hash
- Cryptographic Storage of PHI Data
- Prevention of SQL Injection
- Prevention of Cross Site Scripting (XSS)
- Use KeyStore as appropriate
- Use SSL
- Digital Signature to counter Non repudiation

Class Diagram

