The quick deployment process was completed within several weeks from October to November 2018. Yubico offers an easy-to-use portable security key that integrates well with Okta RADIUS server agent, providing defense against phishing and man-in-the-middle attacks.

**The Challenge**
Avance Care evaluated multiple solutions for securing access to business critical systems for their overseas contractors. The customer needed a low cost multi-factor authentication (MFA) solution that eliminated the need to issue a company phone or laptop to every employee and contractor without compromising on ease of use or security. Avance Care ultimately selected Okta and the YubiKey to protect AWS Workspaces.

**The Solution**
Avance Care is leveraging Okta and their RADIUS Server Agent to interface with the YubiKey to validate that only the intended and provisioned users are able to access critical data and workloads. Data is stored on Amazon EC2, and access is granted through AWS WorkSpace with Okta serving as the Identity provider, and the YubiKey by Yubico protects against credential abuse.

**The Results**
The project was successfully delivered in a very short time frame, with the desired level of security all at a low cost. The solution of combining AWS Workspaces with the YubiKey was both low cost, easy to scale, easy to use for contractors and with the highest level of security. The customer recommends a similar approach to others evaluating secure remote access for external contractors.

**Benefits**
- Simplifies authentication to multiple applications
- Provides convenience and flexible authentication
- Minimal use training required
- Easy to deploy
TCO Analysis
Avance Care evaluated the cost of issuing secure laptops and mobile devices for contractors and compared that of embracing BYOD with enforcing Okta and the YubiKey for identity, authentication, and authorization. The relatively low cost of the YubiKey vs. other authentication solutions made the combination of AWS Workspaces, Okta, and the YubiKey for MFA a clear solution.

Lessons Learned
The upfront cost and TCO to deploy phones and laptops to contractors and temporary employees is substantial. The combination of the YubiKey and Okta makes it really simple and cost effective for organizations to secure AWS workloads. Okta and the YubiKey offer simple deployment for admins, and ease of use for end-users. Okta enables secure identity management and single sign-on to desktop and mobile applications. Layer YubiKey authentication on intelligent policies based on login context to prevent unauthorized access.

Case Study
Avance Care

Industry
Healthcare
Operation since 2008

Area served:
Triangle area North Carolina

Protocols
YubiOTP with Okta RADIUS

Products
YubiKey 5 Series

Deployment
Firstline workers employees and contractors

Ecosystem Partner
Okta

Customer Reference
Public

Country of Work
USA

Start Date of Project
October 2018

End Date of Project
November 2018