

ENTRUST HSMs ENHANCE THE SECURITY OF MEDICAL DEVICES



ENTRUST
SECURING A WORLD IN MOTION



Healthcare sector is amongst the strong market for security and risk management vendors to help protect patient data, protect critical healthcare devices, and improve compliance with numerous regulations.”

SPARK Matrix: IoT IAM, 2020



Entrust and its technology partners deliver complete solutions that secure medical device manufacturing, ensure trust in their deployed ecosystems, and protect data privacy and integrity



Challenges as medicine goes digital



Increasing
cyber attacks



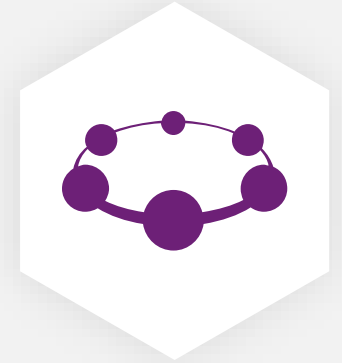
Data privacy
regulations



Touchless
access



Use of
smart devices



Expanding
interconnectivity

Need a foundation of trust

Data privacy regulations



Healthcare workers require safe secure access to systems

Passwords aren't hygienic

Healthcare going touchless
and passwordless



Many hospitals use physical smart cards to access healthcare computers



With virus known to spread by surface transmission, healthcare workers need a safe alternative



Going touchless – smart card security without the physical smart card



Smart credentials are provisioned on workers' phones. Phones stay in pockets and PPE-clad workers are prompted for a PIN on computer to login

Connected devices need security



Smart phones



Wearables



Anesthesia machines



Bedside monitors



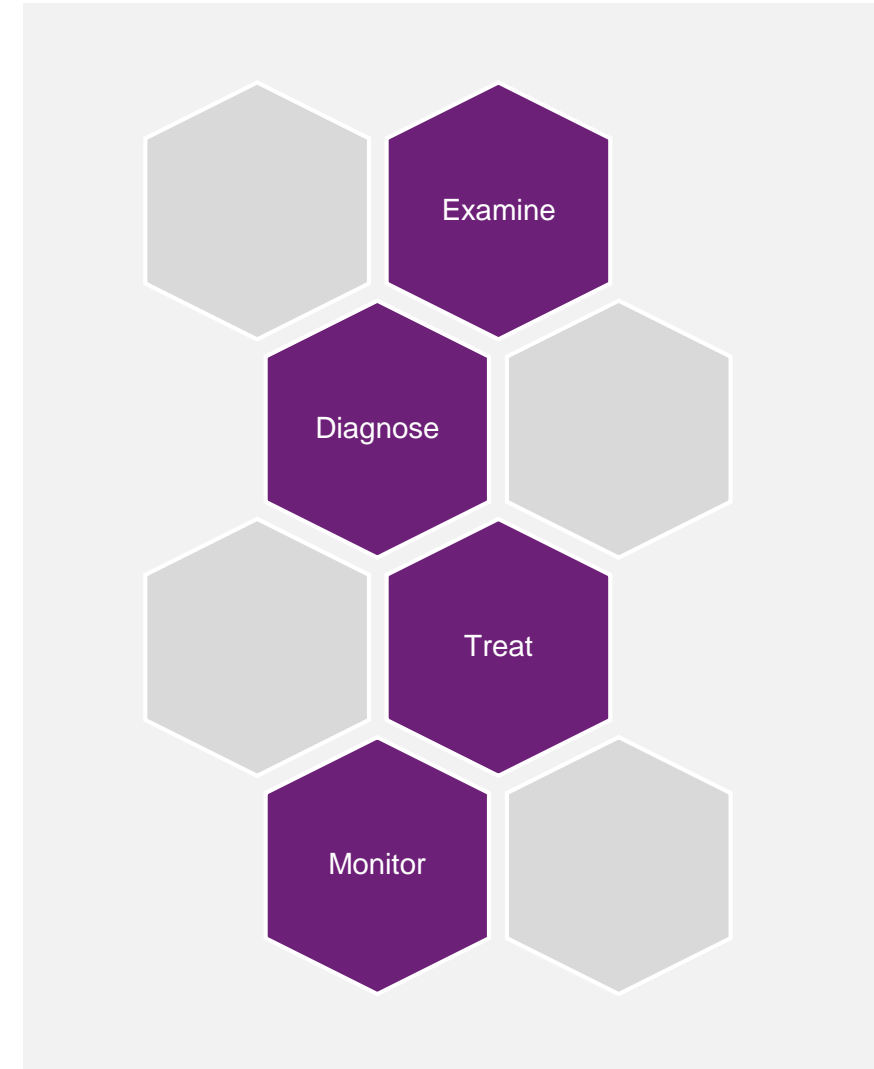
Insulin pumps



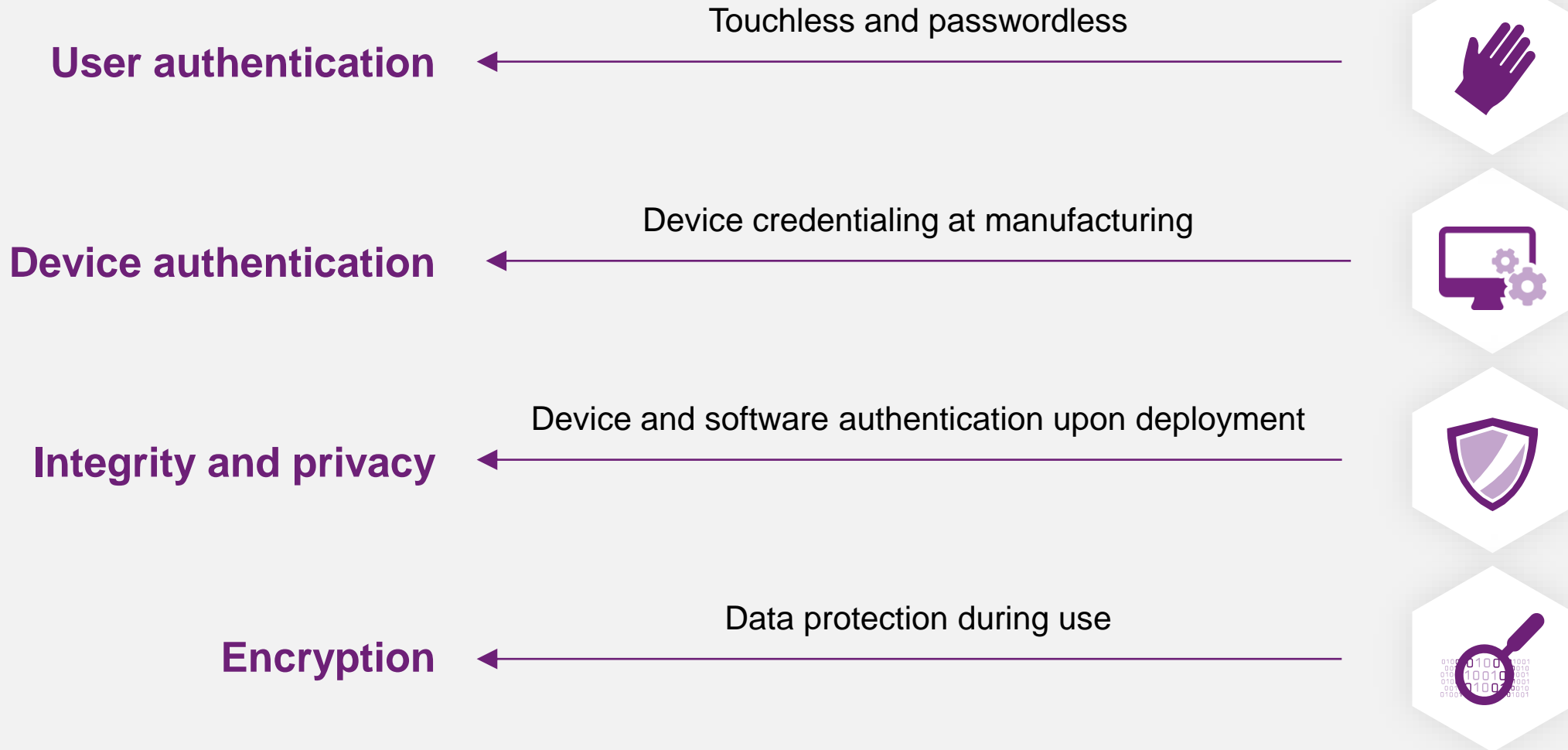
Pacemakers



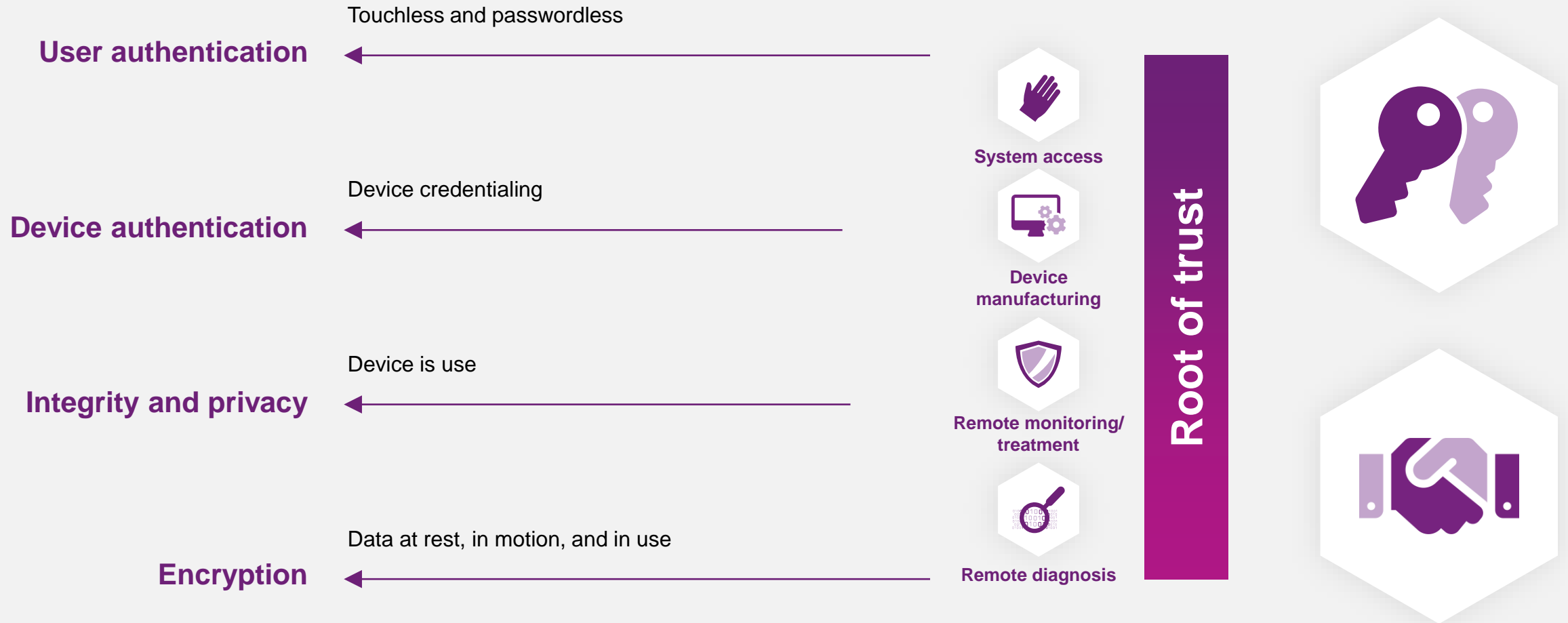
Surgical robots



Securing medical system access and devices



Building a root of trust



Entrust HSMs: A foundation of trust



Highest level of protection for encryption or signing keys



Implement and enforce customer-defined policy



“Harden” applications that use cryptography



Source of high quality random numbers for keys



HSMs are certified, trusted platforms for performing cryptographic operations and protecting keys

Entrust HSM family of products

Cloud integration



Entrust nShield Solo
Server-embedded PCI ecard



Remote monitoring



Entrust nShield Edge
Low cost, portable



Develop packages



Time stamping package



Entrust nShield Connect

Network attached, shared

Use cases: Identity for healthcare

Identity Proofing – fully digital identity verification
Best-in-class multi-factor authentication (MFA)
Credential-based passwordless/touchless access
Secure portals – employee, patient

Single sign-on (SSO)
File encryption and document signing
Adaptive risk-based authentication
Self-service password resets



Healthcare professionals

Doctors, nurses, clinicians

Secure access to patient records and care systems from anywhere. Passwordless and touchless options.
Secure delivery of test requisitions for patients including third party lab partners
Secure receipt of patient test results
Secure patient communications
Mobile signing of prescriptions and documents
Secure access to email and employee portal



Healthcare support staff

Admin, Operations

Secure access to all apps, networks, & VPN from anywhere
Digital patient onboarding
Secure delivery of patient support services: records, billing, insurance forms, etc.
Secure delivery of support services to healthcare employees: HR, employee portals, etc.



Patients

New & existing

Self-service digital identity verification
Secure digital onboarding – option for virtual patient ID
Secure access to patient portals – healthcare, insurance
Self-service password resets



Use cases: Secure connectivity and data sharing

Patient-Centric Care



› Customer need:

- Provide secure connectivity for all external patients
- Drive patient-centered culture through technology
- Promote growth and flexibility for future expansion

› Solution:

- Encryption as a service subscription platform integrated with Entrust nShield to protect and manage cryptographic keys

› Benefits:

- Enhanced online communications with patients
- Ensure PII/PHI is always secure for compliance
- Brings staff, clinicians, and patients closer together

Clinical Trials



› Customer need:

- Secure paperless cloud-based data sharing
- Automate document handling and exchange
- Trusted signature capture on mobile devices

› Solution:

- Entrust nShield root of trust secures customer's cloud-based clinical trial digital signing solution

› Benefits:

- Accelerate delivery of new drugs to market
- Reduce cost/provide competitive advantage
- Facilitate compliance to regulatory standards

Entrust Security

20+

Years of delivering trusted threat protection and enabling compliance



Deep expertise and track record in applied cryptography



HSM market leader with a long history of industry certifications and validation



› Cloud IoT Blockchain Payments

- Solutions delivering trust for business critical applications and information

1000+

› Organizations rely on Entrust to secure and support their applications and information

- 57 of the Global Fortune 100
- 10 of the top 20 FTSE 100

Trusted by clients and partners worldwide

\$800M+

Revenue

2,500+

Employees

50

Years of innovation

1000+

Technology and
channel partners

Market leader in the

4.7B

annual financial card
and government ID
issuance market

690K

websites
secured globally

45k+

instant issuance
deployments worldwide

24M+

SWIFT messages
encrypted &
secured daily

10M

secure identity
& payment credentials
issued daily

57

Of Global Fortune
100 companies use
our HSM

25

countries use our PKI,
as well as the UN,
Interpol & NATO

95M+

protected workforce and
consumer identities



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