



Dell Precision Workstations

# Healthcare and Life Sciences solution guide.

Dell Precision workstations - enabling sector and workforce transformation.





## Meeting the challenge of sector **transformation.**

In the digital era, healthcare and life sciences technologies are progressing at an exponential rate, advancing medical knowledge, enhancing the lives of the people we serve, improving patient outcomes and driving efficiencies. At the same time, growing demand, constrained healthcare budgets and the requirement to cater for the needs of an ageing population with longer life expectancy and multiple health issues combine with regulatory and compliance pressures to drive the search for new ways of doing things, for speeding-up processes and controlling healthcare costs.

Into this highly pressurised environment, a new wave of technology is opening-up possibilities, enabling innovation and potentially transforming ways of working and the demands being made on the workforce. Cloud-enabled mobility, big data, real-time analytics, healthcare IoT, virtual, augmented and mixed reality technologies are all helping to enable healthcare organizations to make faster and more effective decisions and increase workforce productivity.

Our user-centric approach puts Dell EMC at the forefront of these developments, providing Precision workstations that act as a bridge to the new technologies and transform working practices, enabling users to interact with technology in more natural ways, using mouse, keyboard, voice and gestures in clinical and research environments that increase productivity and solve key healthcare challenges.



## Tackling some of the key sector **issues.**

In the Healthcare and Life Sciences sector, Dell Precision workstations provide high-performance tools that maximize productivity and minimize wait time. Drawing on significant experience in the sector, Dell Precision workstations have been developed and built to help healthcare organizations to tackle key issues, including:



### Siloed and disparate data sets

#### The problem:

The need to access and process clinical and patient data often held in different formats and in separated silos within an organization or across disparate organizations.

#### The solution:

High-power Dell Precision workstations are capable of processing and integrating large amounts of data quickly, using compute power, large RAM, SSDs and high-end graphics displays. The technology enables care providers to connect seamlessly to each other and the information they need, for better decision-making and improved patient outcomes.



### Effective and efficient data management

#### The problem:

The explosion of data in healthcare IT environments demands a strategic approach that enables organizations to leverage its value in diagnosis, clinical care and data analytics.

#### The solution:

Dell Precision workstations provide multiple users, clinicians and researchers with secure access to powerful compute and visualization capabilities that enable data analytics from the wealth of available healthcare and patient information, plus analytics based on real-time location data, clinical IoT device data and even embedded cognitive abilities.



### Ensuring security and compliance

#### The problem:

In an ever more-connected and open world, healthcare organisations face the need to develop an IT strategy that protects sensitive information, patient data and physical assets without compromising flexibility and compliance.

#### The solution:

Centralized Dell Precision workstations enforce policy-driven access based on location and network type, meaning access is only granted to authorized users and data is kept safe, ensuring it never leaves the organization's firewall. Dell client security, including data encryption, ensures that all client devices, in the office ward or community, are always secure. High power workstations are able to process all available data for expert analysis to support real-time decision-making and reduce risk and liability.



### Building the digital workplace

#### The problem:

The rapidly evolving healthcare environment demands more effective and faster collaboration between clinicians, patients, administrators and service providers, presenting organisations with major challenges around connectivity, security and cost control.

#### The solution:

Dell Precision workstations enable digital workplace solutions designed to deliver seamless user experiences that integrate identity, application and enterprise mobility, allowing anytime, anywhere access to all applications and services across all devices and supporting the emerging worker profiles that demand different, individual technology solutions to optimise productivity. Solutions deliver intuitive, cloud-based mobile applications and secure fingertip access to data, often at the point of care, to enable connected clinical teams.

## Making the transition - why Dell?

Dell EMC is unique in the sector, the only provider of end-to-end workstation solutions based on a broad portfolio of products with system optimization built-in, ISV certification for key applications and the world's most comprehensive ecosystem of networking, storage and support.

### The right tool for the job

Dell Precision workstations are available in a wide range of form factors, including mobile, desktop and rack workstations that can be tailored to a diverse range of healthcare roles, usage tasks and environments.

### ISV certification

At Dell EMC we invest thousands of hours with independent software vendor (ISV) partners from healthcare and life sciences to ensure that Dell Precision workstations are ISV-certified to deliver tested, fully optimized solutions for maximum efficiency and reliability.

### Tuned for performance

Dell Precision workstations feature Dell Precision Optimizer (DPO), a unique, free, pre-loaded software tool that delivers performance tuning in healthcare applications. DPO makes automatic adjustments to CPU, memory, storage, graphics and operating system according to the application workload and gives greater system control through updates for new drivers, BIOS, application software, firmware and other components.

### The bridge to new technologies

The Dell EMC Precision product line-up provides a bridge to the rapidly evolving healthcare environment, as your workforce transitions to new technologies like mobile healthcare, telehealth, wearable and ingestible electronics, digital genomic sequencing, healthcare AI and nanotechnology.

