When saving minutes means saving lives

Windows Clinical Mobility
True mobility in healthcare. It’s about time

From home health and community care to doctors sharing their time between facilities, healthcare has always been mobile. And the time-saving benefits of keeping clinicians productive while on the move are obvious.

But it’s only recently that technology-driven mobility has come into its own. And only now that it’s shining in a clinical setting.

Three forces for change

Three factors play a part in this paradigm shift:

• Ubiquitous connectivity, via mobile networks and Wi-Fi
• Ultra-portable form factors – like tablets and smartphones – that don’t sacrifice functionality
• Applications optimised to work seamlessly on those form factors

With this convergence, it’s no surprise healthcare professionals are looking to bring their own mobile devices into the workplace. In fact, a recent poll showed forty-seven per cent of clinicians use a workplace. In fact, a recent poll showed forty-seven per cent of clinicians use a PC in their practice.*

This ‘consumerisation of IT’ delivers a familiar device experience as clinicians move between clinical settings. Three forces for change

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Tablets rise to the challenge – or do they?

With the power of a WOW and the weight of a clipboard, tablet PCs certainly seemed to be the answer. But the wrong type of tablet brings a problem of its own. Because consumer-focused tablets are designed for reading – not writing – they’re a poor fit for many patient care systems. As you no doubt know if you’ve tried to enter patient data on a touchscreen yourself.

The solution? A new generation of tablets, designed for the workplace. In particular, the clinical workplace. Where saving time doesn’t just mean greater efficiency – it means saving lives.

The tablet comes of age with Windows Clinical Mobility

The right tablet for a clinical setting is one that overcomes workflow roadblocks – without creating new ones. Increasing your productivity over the course of the day, and allowing you to respond urgently when it really matters.

It’s a device that provides a laptop-comparable user experience, able to handle desktop-based records and applications, but without the weight of a laptop. A device with the flexibility to enter notes quickly on the run, with a pen and digitizer backed by handwriting recognition. A device that works seamlessly with a mouse. Offers simple connectivity to printers, projectors, and USB storage devices. While providing clinical-grade device and data security, and the same experience when you access information on other Windows devices.

How does Windows Clinical Mobility save time?

First, the flexibility of Windows tablets supports your clinical workflows, and allows you to get work done at the point of care. No more ‘back to the nursing station’ between patients while rounding.

Windows mobility also allows rich collaboration between clinicians, getting a second opinion without delay. And there are day-to-day efficiency benefits as well. Imagine being able to see just one more patient a day – and making a critical diagnosis one day sooner.

Microsoft Clinical Mobility

A complete tablet-driven ecosystem for productive patient-centric health

“We spent about a year trying to develop the application on a non-Windows tablet. What we found was that it was not going to work in the enterprise setting. We weren’t able to achieve a lot of the functionality that we could achieve with Windows 8.”

University of Pittsburgh Medical Center


Pen and paper

Highly mobile, but make access and legibility a challenge

Patient care systems on the desktop

Solve record-keeping issues and enable decision-support, but at the expense of productivity

Workstations on wheels

Increase the productivity to patient-care systems, but can interfere with doctor-patient interactions

Consumer tablets

Improve patient interactions, but come with a host of data-entry and other usability issues
Clinical Mobility at a glance

The portability of a tablet, the flexibility of a laptop, and the power of a desktop PC.

Manageability

Connection to a clinical ecosystem that simplifies management and secures patient and provider data.

An Intel Core processor powering your Windows tablet will ensure it’s a powerful clinical tool, not a toy.

Long battery life means you don’t have to worry about your device deserting you mid-shift.

Functionality

USB connectivity to video and printing devices, so they’re easy to use when you need them.

Access to a wide range of clinical applications can improve workflows and patient interactions.

Choose a Windows tablet with a larger screen surface to maximise the visibility of electronic medical records and medical images.

A simple snap-on keyboard keeps data entry intuitive when accessing desktop-based electronic health record systems.

Connectivity

Connection to a clinical ecosystem that simplifies management and secures patient and provider data.

A range of input options, like mouse, touch and pen, give you flexibility and familiarity.

Flexibility

The stand and docking station that comes standard with many Windows 8 devices makes it ergonomic to use in a wide variety of clinical environments.

With the lightweight design of a tablet, you’ll almost forget you’re carrying a powerful clinical device, easily able to run EMR systems.
An hour in the life of Windows Clinical Mobility

10:02
Using an easy-to-attach keyboard and USB mouse, a registrar accesses the legacy patient-care system on a mobile device without compromising his ability to use it.

10:07
When a sudden emergency calls him away, the tablet’s pen plus built-in handwriting recognition makes it practical to take quick handwritten notes.

10:21
Simple graphics on a large, high-resolution screen help show a post-operative patient his medical imaging results in an easy-to-understand manner.

10:30
Long battery life means there’s no need to worry about your device running out of charge mid-round.

10:37
Needing a second opinion, the registrar locates a rehabilitation specialist using Presence, followed by a short video conference.

10:45
Easy access to the hospital’s patient-care system also makes double-checking active medications simple and accurate.

10:59
His efficiency greatly improved by his tablet, the registrar spends 20 minutes preparing a conference PowerPoint presentation.

Making every minute count
A complete solution for mobile healthcare

Collaborative, patient-centric 21st century care calls for the co-operation of a network of clinicians, nurses and carers – but also on the hard work of administrative staff. Including the IT professionals who manage patient-care systems and the devices that use them. Which is why Microsoft Clinical Mobility is designed to keep them productive and responsive as well.

Not just in healthcare, but across the enterprise, Microsoft mobility is helping companies increase productivity, reduce errors, achieve substantial return on investment and keep IT costs under control. Forrester collected data from 60 enterprise organizations currently using Windows or non-Windows tablets, and found a number of significant benefits specific to Windows devices.

Smarter security

No clinical mobility solution can afford to sacrifice the confidentiality and security of patient information. Managed Windows tablets slot seamlessly into a secure IT ecosystem that can also include desktop PCs, smartphones and other devices operating on a single, universally secure Windows platform, providing:

- Powerful encryption features to secure devices and their data from software attacks and physical theft
- Trusted Platform Module technology, to safely store encryption keys on your devices
- Remote wiping, to remove confidential information from devices that are lost or stolen.

Simplified management of your mobility ecosystem

To prevent data from falling into the wrong hands, Microsoft can deliver robust identity and access management from the cloud, in sync with institutions’ existing on-premises deployments. It provides for multiple levels of access, so practitioners have access to precisely the data they need to do their job, and no more. Meanwhile, healthcare IT professionals will have their lives made easier by management tools like:

- Cloud-based self-service password reset for employees
- Group Management, including user self-service management of groups
- Group-based provisioning and access management for hundreds of Software as a Service applications
- Machine learning–driven security reports to show log-in anomalies and other threats

- Rich and robust synchronization of user identities from on-premises directories, including write back of changes
- Reduced risk and support compliance requirements with comprehensive multi-factor authentication (MFA) options.

Your Microsoft Clinical Mobility environment also provides simplified mobile device management, so you’re able to manage mobile devices, as well as PCs, from the cloud. Which means practitioners can bring their own Microsoft devices to work while protecting corporate data and adhering to security policies. It can deliver and manage apps across a broad range of devices, manage the full range of Windows devices, configure and deploy access policies, and inventory hardware and software.

A return on investment of 128%.

A 46% lift in productivity for highly mobile staff.

Device consolidation, resulting in reduced device purchase costs.

A reduction in annual device licensing, management, and support costs.

Lower annual costs related to device security.

And critically for healthcare, fewer errors from users of Windows tablet devices.

A complete solution for mobile healthcare

The Joint Commission Sentinel Event database reveals that poor communication is the root cause in nearly 70% of reported sentinel events.

The Mobile Professional in Healthcare: Improving Care Team Collaboration and Performance Through Unified Communication and Collaboration. IDC Health Insights
Exciting new healthcare applications

It’s a fantastic time for technology-minded practitioners. Because Microsoft and our application-development partners have affirmed our commitment to supporting patient-centred, team-based medicine and high-quality care through our ever-expanding clinical application ecosystem.

In addition to the option to create apps for your own organisation, there are over 850 health apps available in the Windows store right now. Here are some of the most exciting developments:

- **UpToDate** lets clinicians access current, synthesised clinical information, including evidence-based recommendations, quickly and easily.
- **AirStrip’s AirStrip ONE Cardiology app** allows doctors to evaluate ECGs quickly to determine if a patient has suffered a heart attack and needs surgery.
- **VitalHub Chart** is a mobile solution that provides clinicians with an integrated view of the patient by rapidly accessing and aggregating data from multiple disparate systems, saving clinicians’ time.
- **Micromedex Drug Information**, from Truven Health Analytics, contains a comprehensive drug information database and is backed by Micromedex’s thorough, unbiased editorial process. Now clinical care teams can instantly get the information they need to support confident treatment decisions from anywhere.
- **Epic’s Hyperspace 2014 app** allows clinicians to run Hyperspace directly on a Windows 8 tablet, letting them support physicians in inpatient and outpatient settings and manage clinical and revenue-cycle workflows.
- **Allscripts Wand** uses all of the navigation, voice and camera capabilities of the Windows 8.1 tablet to place orders, complete clinical documentation, take clinical photos and update all aspects of a patient’s chart.

Collaboration tools you can rely on

In a clinical setting, the importance of accurate, instant and up-to-date communication can’t be understated. As the IDC Health Insights whitepaper, The Mobile Professional in Healthcare, noted:

Fragmented communication and information handoffs between shift changes can result in suboptimal workflows, performance of redundant tests and, more importantly, patient safety issues. In fact, the Joint Commission Sentinel Event database reveals that poor communication is the root cause in nearly 70% of reported sentinel events.

Microsoft’s globally recognised collaboration solution, Lync, keeps clinicians, nurses and administrative staff in continuous contact through their mobile (and desktop) Windows devices. Through Presence, instant messaging, voice and video conferencing, accurate information and a critical second opinion are always close to hand.

Want to investigate Clinical Mobility further? Email MicrosoftHealthAU@microsoft.com