Community Pharmacy IT Group (CP ITG) briefing: Preparing for Windows end-of-life cycles

This CP ITG briefing has been compiled for those supporting pharmacy IT, such as pharmacy system suppliers or IT helpdesks, who may be involved in supporting the transition from older to newer Windows versions. Some sections of this briefing will also be relevant to community pharmacy contractors.

Microsoft releases major new Windows 10 updates periodically, e.g. Windows 10 version **20H2** (available from October 2020). Microsoft no longer fixes security issues discovered with much older Windows versions for free e.g. Windows 10 Home version **1903** free support ended during December 2020 and Windows 7 ended earlier that year.

Microsoft also publish the support deadlines for free support for Windows 10 versions.

Background

Microsoft announced it would no longer uniformly provide free security updates and free support for PCs running Windows 7 after January 2020. Tech Radar report that extended security updates may be available at a cost per device per year for some versions of Windows.

This end of free support for Windows versions does not mean that Windows stops working but it did mean that Microsoft will no longer be uniformly freely update all computers with Windows patches. This could put some systems at risk (e.g. from virus attacks) unless appropriate mitigations are arranged.

To maintain interoperability, some Patient Medication Record (PMR) pharmacy systems adapted towards Windows 10 versions (see FAQs). Mitigations associated with use of non-supported Windows versions are explained within this briefing.

Planned upgrades for computers and operating systems

For those pharmacy contractors upgrading hardware ahead of the Windows end-of-life-cycle deadlines, it is useful to consider opportunities to upgrade to Windows 10 (newer versions) at the same time. Some contractors report a benefit that fewer visits will be required by IT engineers if both the computer and the Windows are updated at the same time instead of separately.

If pharmacy contractors have a system and computer terminal upgrade scheduled already, appropriate Windows 10 versions ought to be deployed as part of this and IT support may give further advice. If contractors wish to upgrade to Windows versions ahead of schedule, they will need to speak to their IT support. Upgrading Windows versions may require investment for either an upgrade on the computer or else new PCs, and in some cases new printers.

The use of unsupported products should be avoided where reasonably possible. Contractors should determine when PCs will be upgraded and consider moving the upgrade forward if the scheduled change is a significant time in the future.

HowToGeek.com reported a method for Windows 7/8/8.1 machines that may enable Windows 10 for no cost where the Windows 7/8/8.1 legitimate Microsoft key can be re-entered – but if such methods are relevant then IT support should be involved with implementation. In some cases, if Windows 7 computer terminals were originally pre-installed with Windows 10 but downgraded to Windows 7 for compatibility reasons, then IT support might hold records for the Windows 10 license keys for the computer.

Windows 10 can run on older hardware, but as Windows 10 is a modern operating system it might struggle to work well on older machines. *TechRadar.com* recommend at least 8GB of RAM ideally and a 160GB hard drive for Windows 10 to run well. Read more at: How to prepare for Windows End of Life cycles (Techradar.com).

Possible extension of support for Windows 7

Extended security updates may be available at a cost per device per year for some versions of Windows – which may be being covered by IT support, depending on contractual arrangements.

Use of non-supported systems

Unless contractors have an upgrade to a supported Windows version before support expires, there are precautions contractors with their IT support may take until systems are upgraded if non-supported versions of Windows must be used:

The National Cyber Security Centre (NCSC) has provided some guidance on use of non-supported Windows that explains:
- malware can spread much more easily on obsolete platforms because, without security updates, known vulnerabilities will remain un-patched;
- such systems may be targeted by hackers etc.;
- obsolete platforms (no longer receiving updates) include risks but there are some short-term steps to take for those that can't move off out-of-date platforms and applications straight away, e.g. isolation of the machine.

Additional steps may include contractors and/or their IT support considering the points below:
- Ensuring familiarity with the Ten steps to help improve data and cyber security within community pharmacies.
- If Internet access is supplied via the PMR supplier or IT support, a "Restricted Access" model may be used as needed. This may limit any browsing to approved Pharmacy websites only, which will reduce the risk of contracting malware from the internet. Use a 'limited' rather than Computer Administrator accounts for logging on to non-supported Windows versions for day-to-day work.
- Beware of fake anti-virus websites, popups, emails, and phone calls. Ensure anti-virus software comes from a legitimate source and is updating regularly.
- Stop using Internet Explorer as the default browser. Chrome, Microsoft Edge and Firefox will continue to support usage with non-supported Windows versions, updating as new threats arise. This further reduces the risk when browsing the internet.
- Do not use links or attachments originating from an email unless you are sure they are valid, and you are expecting the email. Always remember that an email can look like it's from a valid contact when it's not, so always double check if in doubt.
- Only access files you trust. Be cautious of files on memory sticks from untrusted sources, and even of files on your own network.
- Backup your PC regularly to protect against data loss.
- If you are running a non-supported Windows versions on your computer, note that you may start to receive pop-up warnings in the future advising you to upgrade.

- Keep an eye on the security situation and adjust your response appropriately.

Pharmacy contractor IT support may also issue future communications on this topic which may include more specific information for specific pharmacy contractors' specific situations.

Windows 10 updates and impact on software compatibility

Microsoft make updates for Windows 10 available with even greater frequency than had been the case for older Windows editions. Some of these updates can occasionally also impact certain software compatibility, e.g. potential compatibility for certain Windows 10 updates to impact the functioning of the PMR software. IT support, where needed may:
- control which updates are to be allowed to be installed by pharmacy teams – after some assurance testing has been completed, where that is needed; and
- plan for the short, medium and long-term scheduling of updates to be applied, prioritising as required.

Windows 10 versions: Further deadlines

Every Windows product has a lifecycle, including the major Windows 10 update versions. The lifecycle begins when a product is released and ends when it's no longer supported. Knowing key dates in this lifecycle helps Windows users and IT managers to make informed decisions about when to update, upgrade or make other changes to software. The Microsoft Product search webpage will outline the most recent Windows 10 version deadlines. As of January 2021 these were expected to include the below.

Windows 10 version history	Date of availability	End of service for Home, Pro, Pro Education, and Pro for Workstations editions	End of service for Enterprise and Education editions
Windows 10, version 20H2	October 20, 2020	May 10, 2022	May 9, 2023
Windows 10, version 2004	May 27, 2020	December 14, 2021	December 14, 2021
Windows 10, version 1909	November 12, 2019	May 11, 2021	May 10, 2022
Windows 10, version 1903	May 21, 2019	December 8, 2020	May 11, 2021
Windows 10, version 1809	November 13, 2018	November 10, 2020	May 11, 2021
Windows 10, version 1803	April 30, 2018	November 12, 2019	May 5, 2021
Windows 10, version 1709	October 17, 2017	April 9, 2019	October 13, 2020

Windows 10 version history (Enterprise LTSC/LTSB editions)	Date of availability	Mainstream support end date	Extended support end date
Windows 10 Enterprise LTSC 2019, Windows 10 IoT Enterprise LTSC 2019	November 13, 2018	January 9, 2024	January 9, 2029
Windows 10 Enterprise 2016 LTSB, Windows 10 IoT Enterprise 2016 LTSB	August 2, 2016	October 12, 2021	October 13, 2026
Windows 10 2015 LTSB, Windows 10 IoT 2015 LTSB	July 29, 2015	October 13, 2020	October 14, 2025

Microsoft say they will support at least one of their Windows 10 'semi-annual channels' until Oct 2025.

Frequently asked questions (FAQs)

Q. Will pharmacy contractors be complying with Warranted Environment Specification (WES) document if remaining on a Windows version after the free Microsoft support ends?
The NHS Digital WES document sets out technical standards for those systems which make use of NHS Spine and Smartcard services and outlines when free support of different versions of Microsoft Windows is due to end. The WES recommends ensuring systems are "supported".

For those pharmacy contractors upgrading computer hardware ahead of the Windows versions deadline, they may wish to consider upgrading their Windows operating system at the same time. WES compliance was previously included as a Pharmacy Quality Scheme criterion ahead of the February 2019 review point. Alignment with the WES was not included within the 2020/2021 Pharmacy Quality Scheme, but WES criteria might return in possible future Pharmacy Quality Schemes (e.g. possible 2022 review point deadlines). The WES states those deadlines where free support is ended for Microsoft operating systems, but it may also state some of the exceptions – such as where support has been extended for certain organisations. If the WES refers to formal "NHS organisations" having extended the Windows 10 support, note that community pharmacies are not formally categorised as "NHS organisations".

Q. Will the pharmacy Data and Security Protection (IG) Toolkit (DSPTK) include questions which relate to 'up-to-date systems' or Windows operating systems?
Yes previous editions of the DSPTK included questions during previous years about supported systems. PSNC toolkit guidance is published before each deadline, after PSNC has completed discussions about the changes to the toolkit. Read the most recent pharmacy updates about DSPTK: DSPTK guidance.

Additional information can be found at the Microsoft website. If you have queries on this briefing, please contact Daniel Ah-Thion, PSNC Community Pharmacy IT Lead. Join the Community Pharmacy Digital email group to hear about digital, IT and EPS developments and express your views on these topics.

> **About CP ITG**: The Group was formed in 2017 by PSNC, NPA, RPS, CCA and AIMp. The meetings are attended by members representing the five organisations and representatives from pharmacy system suppliers and NHS Digital. Further information on the group can be found on the PSNC website.