26 February 2021

Ref: **REGULATION 28 - 4 January 2021 (PSP)**

Dear Ms Brown,

Please accept our regrets, with regards to the outcome of the situation detailed in the Regulation 28 report dated 4 January 2021.

In light of this, a detailed review and investigation has been completed and is summarised below. This investigation has ensured that we fully understand the issue and are able to form a robust plan to remove the risk.

A response to the five areas of concerns, outlined in the report, is provided below.

Investigation Summary

- On 4 August 2020 (11:22) a staff member at Ashfield surgery contacted EMIS Support and raised case reference ▮▮▮▮▮▮▮ due to an issue with their appointment book not refreshing. The Practice was advised to contact local IT and to ensure that the UDP ports 8088 - 0892 were fully open throughout the network. As no further contact was received from the Practice (after 72 hours) to inform the support team that this advice had not been successful, the case was closed and the Practice were advised of this.

- In addition, the Practice raised a second issue on the same day, 4 August 2020 (11:49), ▮▮▮▮▮▮▮ relating to a clinician reporting they were getting a message on their PC alerting them that there was 'Not enough memory'. The Practice was again advised to contact local IT as the issue related to hardware. Again, as no further contact was received from the Practice (after 72 hours) to inform the support team that this advice had not been successful, the case was closed and the Practice were advised of this.

- A user-facing article relating to this issue was originally published February 2020:

  Why isn't my Appointment Book refreshing?

  Please find this article at appendix 1 of this letter.

Fulford Grange
Micklefield Lane
Rawdon
Leeds LS19 6BA
Tel: 0113 380 3000
emishealth.com

Concern 1

- *On the 10th August at 17:30hrs, before inflicting a fatal wound to the neck, the patient had a telephone consultation scheduled with the GP at the Ashfield Surgery. The appointment had been booked by a relative that afternoon. A technical issue with the EMIS system caused the consultation list of the GP due to speak to the patient to not update and the GP did not realise the appointment had been added to the list and did not call the patient.*

- *Practitioners at the surgery had realised that the system was intermittently not updating consultation lists on or around the 30th July 2020 and had raised the issue with EMIS on the 4th August 2020. To date a solution to correct this intermittent problem has not been identified. Evidence was given at inquest that it does not just affect the Ashfield Surgery but has occurred at other surgeries across the country.*

Response

- The EMIS Web appointment book is kept up to date on a user's PC through a combination of

    o Periodically requesting updates from the EMIS Web data centre (which is always correct)

    o Receiving updates from other PC's whenever an appointment is booked. This mechanism uses 'UDP messaging' to broadcast appointments to all PC's on the network to keep them up to date

    o A manual 'refresh' capability is available in the appointment book to cover the eventuality of the UDP messaging not working. Customers have been informed that this is available to be used where there are concerns around refresh working

- UDP messages require specific configuration of the IT network to ensure that they can flow correctly. EMIS includes this as part of the standard configuration advice

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Fulford Grange
Micklefield Lane
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emishealth.com

- Following investigation, we can confirm that the surgery did raise the issue with the EMIS support team on 4 August 2020 and were provided with a resolution that they should contact local IT to ensure that the UDP ports 8088 - 0892 were fully open throughout the network.

- We have found that a number of factors can contribute to network settings changing which cause UDP messaging stop working in other surgeries including Hardware updates to PCs. updates to the PC operating system (OS), NHS switch to Windows 10 or as local IT teams enforce new network policies to an entire organisation or locality.

- A user-facing article has been posted on the EMIS Customer portal to ensure they know to mitigate the risk and is available for self-help (KB0064144) to all customers: "*Why isn't my Appointment Book refreshing?*" The article was originally published before this incident (07/02/2020) and updated further on 22/12/2020.

- The information feed, visible to all users when logging on to the EMIS Web system, was also updated to advise users to review the "Appointment Book refresh" notice on 23/12/2020.

Concern 2

- *Particularly for telephone consultations (where there will not be a patient physically present in the surgery to query why they have not been seen), the fact that the consultation lists do not always update creates a risk to life as a consultation could be missed for a patient with a medical emergency.*

Response

- The increase in remote working and telephone consultations has led to an increase in the number of users experiencing the issue. It is not clear from the information available if the GP was physically at the Practice completing telephone consultations or completing these from a different location.

- Where a user is using a VPN (Virtual Private Network) to create an secure connection in order to login to EMIS Web from home, changes made to the Appointment Book at their workplace cannot automatically transfer via UDP

Fulford Grange
Micklefield Lane
Rawdon
Leeds LS19 6BA
Tel: 0113 380 3000
emishealth.com

messaging to their PC (or vice-versa). Users should regularly click the 'Refresh' icon on the Appointment Book ribbon when working remotely.

Concerns 3, 4 and 5

- *It is not known whether all GP Surgeries using EMIS have raised an alert that this error can occur.*

- *To mitigate the risk of missing appointments the Ashfield Surgery has identified that if practitioners logs out of the EMIS system and then log back on the consultation list will update. Therefore, all practitioners are advised to log out and log back in before completing their consultation lists. However, on one occasion since the patient's death a locum GP carrying out a list at the surgery did not know to do this and missed an appointment.*

- *The methods to mitigate this risk are vulnerable to human error if the practitioner is unaware of the need to log out of EMIS and log back in or if they forget to do so.*

Response

- Due to home and remote surgery working due to COVID-19, we have noted an increase in reports of this issue.

- This has prompted EMIS to update its self-help information and to raise awareness of the issue via the article "Why isn't my Appointment Book refreshing?" As noted above, the article was originally published on 07/02/2020 and was updated further on 22/12/20. In addition, the EMIS Web homepage information feed was updated to ensure this was visible to all EMIS Web organisations and users as of 23/12/2020.

- There is no need for users to log out and log into EMIS Web. The current advice is to use the 'Appointment Refresh' function whilst an automatic capability is developed and released.

Fulford Grange
Micklefield Lane
Rawdon
Leeds LS19 6BA
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emishealth.com

Summary of Actions

A full clinical risk review has been completed and the following actions have been implemented or are in progress, to remove the risk of similar incidents occurring in the future:

1. Customer information feed – an advisory relating to the appointment refresh issue was prioritised to the top of the feed on 23 December 2020 and again on 2 February 2021.

2. A Safety Advisory Notice (SAN 2021-005) advising organisation and users of the issue, the actions that need to be completed, and a link to direct them to further information if required was sent out to all GP Practices and Clinical Services on 3 February 2021.

3. The development of a solution to mitigate the risk to all GP Practices and Clinical Services using the appointment book functionality is underway. This is estimated to be released early Q2 2021, this will:

   - Provide an automated refresh for all the "Current day" appointments.

   - Automatically refresh the appointment book at a pre-set interval if the user has not manually refreshed the appointment book within the specified timeframe.

     For example, if the pre-set refresh time is set at 10 minutes the appointment book will automatically refresh after 10 minutes if there has been no activity that would cause it to refresh within that time frame.

   - Once completed, the functionality will be rolled out to all users in a controlled manner, to ensure it meets effectiveness and performance metrics. This approach is in line with usual processes for changes to functionality to ensure clinical safety and system performance is maintained.

4. A further review of the underlying appointment refresh technology is planned for 2021.

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Fulford Grange
Micklefield Lane
Rawdon
Leeds LS19 6BA
Tel: 0113 380 3000
emishealth.com

We trust that the details outlined above are of help.

Finally, as a company we work very hard to support health care services across the UK and patient safety is of paramount importance to us. We were saddened to read of the issues relating to this particular incident and we would like to pass our condolences on to the family.

If you have any further queries then please contact ████████ at ████████████████████████████ in the first instance.

Kind regards

████████████

Chief Medical Officer, EMIS Group

Appendix 1

Why isn't my Appointment Book refreshing?

Revised by ███████

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24d ago • · 1642 Views •

One of the key functions of your EMIS Web Appointment Book is that it is designed to automatically update to reflect changes made elsewhere in your organisation, so that you always have an up-to-date view of which patients are being seen, who's in your waiting room, and what your availability and workload are going to be like. This function is called 'Appointment Refresh', and if it isn't working it can lead to delays, missed appointments, and potentially a risk to patients.

Unfortunately, the function doesn't always work as it relies on network settings on your PC, and requires very specific configuration. These settings are out of our control and may even be locked down by your local IT support team. Therefore, if the function isn't working it can be difficult for us to fix it straight away, as we may not have the access, or permissions, to change the relevant settings.

What should I do if my Appointment Refresh isn't working?

In order for the EMIS Web Appointment Book to refresh properly, all PC's must be connected to the same physical and logical network, with the same subnet and the same IP range. In addition, the following firewall ports must be open on all PC's:

TCP port 8221
UDP ports 8088 – 8092

Your local IT team will know how to apply these settings; alternatively, our Service Desk can provide you with a small file which can be run on your PC to automatically apply the correct configuration – though, again, your IT team may have restricted this ability.

Fulford Grange
Micklefield Lane
Rawdon
Leeds LS19 6BA
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emishealth.com

My practice has a branch site, we've applied these settings but it's still not working…

Configuration across two or more locations can be slightly trickier – we have an application which we can install and configure in these instances. Call our Service Desk, explain your situation, and ask them about the 'UDP Forwarder' application. Be aware that our Service Desk analysts will need to remotely connect to the spoke servers situated at each location, and, depending on the complexity of your network, getting the configuration exactly right may take a bit of trial and error.

What about appointments booked by external organisations?

Appointments booked by external organisations via GPconnect will not automatically refresh in the Appointment Book this is because external organisations are not on the same physical or logical network. Externally booked appointments will appear in your Appointment Book view once this is next refreshed (either because of an action in your own organisation or if you manually refresh).

My next clinic is about to start and I don't have time to fix this right now – what can I do?

If your Appointment Refresh isn't working, you can manually refresh your own Appointment Book screen with the 'Refresh' button in the ribbon:

Click the 'Refresh' button to manually refresh your Appointment Book screen.
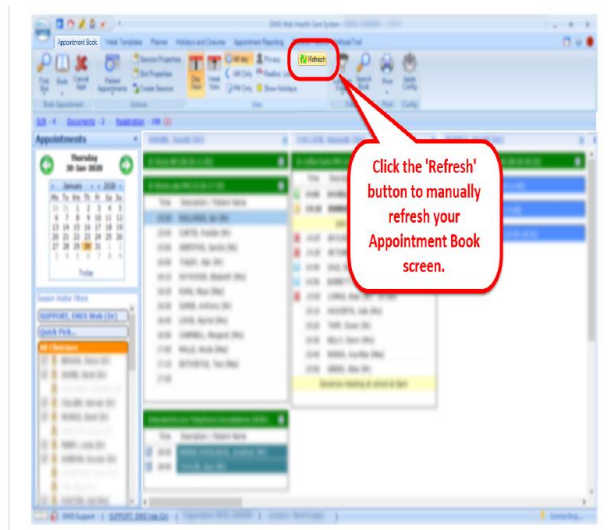
My surgery/clinic/appointment session is ending - surely I can simply log off?
It is particularly important to ensure that no additional appointments have been added before you finish your surgery. It's quite common for externally added appointments (e.g. NHS 111) to be added towards the end of the day, and there is a risk that these could be missed if your Appointment Book is not up to date. Please ensure that you manually refresh at the end of the surgery before finishing.

I've never had this problem before, why has it started happening now?
Updates to your PC, or changes to your operating system (OS) can alter your network settings. We've seen an increase in people reporting this issue as more NHS organisations are switching to Windows 10. Similarly, it's possible that your local IT team may enforce new network settings to your entire organisation.

Does the Appointment Book refresh automatically when working from home?
It depends how you connect to your workplace network.
If you are remotely logging onto a PC which is physically located at your organisation, the Appointment Book will continue to refresh automatically. The reason for this is that the PC you are connecting to is on the same physical network as other PCs at your workplace.

If you are using a VPN (Virtual Private Network) to create an N3 connection and login to EMIS Web from home (e.g. you use an N3 Connect dongle from EMIS or Egton), changes made to the Appointment Book at your workplace **will not**

automatically update on your PC or laptop (or vice-versa). The only way to ensure the Appointment Book is up to date is by clicking the 'Refresh' icon on the Appointment Book ribbon.

Have you investigated other solutions, so this doesn't happen in future?
Given the increase in remote working that has occurred over 2020, we are looking at potential solutions to improve this functionality. Until we can implement a solution we will continue to investigate any instances of Appointment Refresh failure that are reported to us, and resolve those as best we can.