

LCHS40007 Digital Skills & Research Methods

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Contents

Introduction to Sunrise Residential Care Home

Sunrise residential care Home is a place where older adults live and receive care. It helps about 35 people who have memory problems trouble moving and ongoing health issues.

Sunrise Residential care Home is implementing digital tools to improve the efficiency and quality of care. These tools support faster safer and personalised experiences for residents (Bail,2022).

We will discuss the application of MS Excel for data management and MS Teams for communication, exploring how Sunrise Residential Care overcame challenges and enhanced care for its 35 residents.



Source: Bing (n. d)
Picture of health and
Social care .
(Accessed 2nd
October 2025)

Purpose

The purpose of this assignment is to deliver group presentations in Power Point and encourage the use of digital skills and techniques to improve workplace effectiveness and prepare for professional practice (Xia et al., 2020)



Source: Bing (n.d)
Picture of digital tools .
Accessed on 3rd Oct
2025)

MS Excel Operations – Benefits

- **Tracking & Organisation:** Excel is used to track resident health records, medication schedules, and appointments (Bail, 2022)
- **Accuracy & Planning:** A well-designed Excel sheet reduces medication errors by providing a clear, auditable record, improving accuracy in care planning (Bail, 2022).
- **Inventory & Staff Management:** It helps manage inventory records, monitor stock levels of medical supplies and food, and assists in creating staff shift patterns and managing leave requests (LaPolla, 2020).
- **Excel's charts and graphs** help care facilities understand their data and make better decisions (Bail, 2022).
- **Excel also facilitates financial planning**, making it easier to manage costs effectively.
- **Customization & Flexibility:** Excel can be customised with formulas and templates for specific care home tasks, allowing staff to design tools that fit their unique workflows (La Polla, 2020).

Example

Excel can be used for daily health monitoring, such as tracking vital signs like blood pressure and glucose levels over time

.Scenario:

Nurse A uses Excel to log all medications administered during her shift, including time, dosage, and resident name. At the end of the shift, Nurse B quickly reviews the Excel sheet to confirm which medications have already been given, ensuring no doses are missed or duplicated.



Source: (b. n) accessed
3rd October 2025

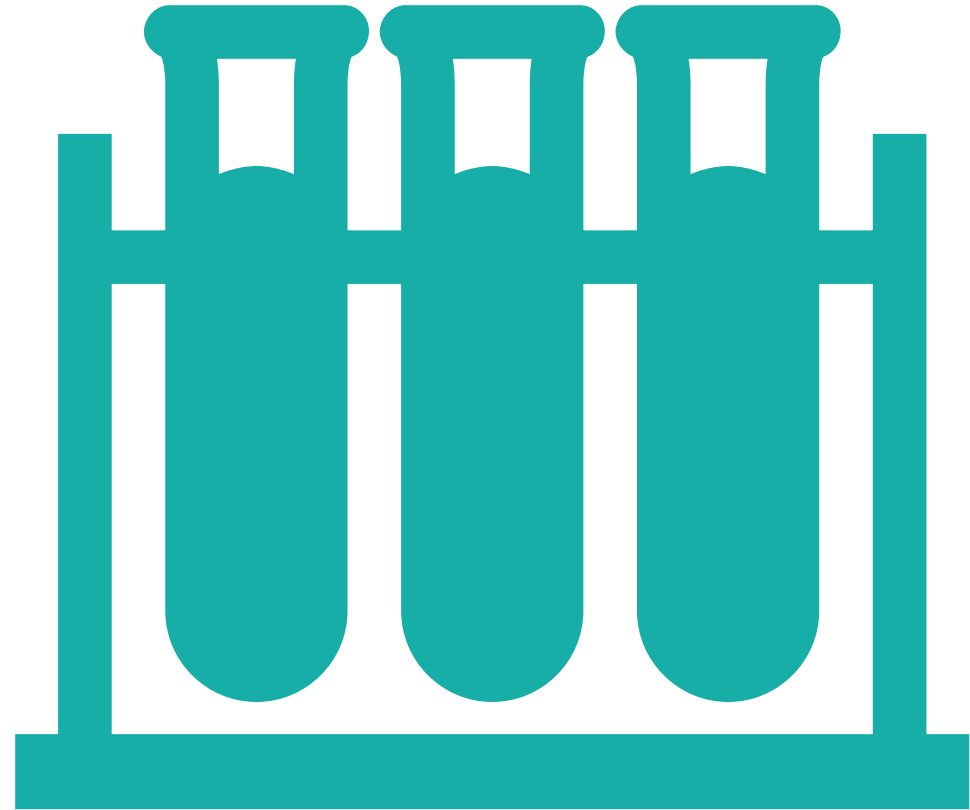
MS Excel Operations – Limitation



- · Security Risks: Excel files can be easily copied, shared, or edited without proper security controls, potentially exposing sensitive resident information (Bail, 2022).
- · Human Error: Manual data entry increases the risk of mistakes, such as incorrect medication doses or appointment times (La Polla, 2020).
- · Version Control: It is difficult to track changes and avoid version conflicts when multiple staff members edit the same file.
- · Lack of Automation: Excel does not provide automatic alerts or reminders for medication times or appointments.
- · Skill & Scale: It requires specific skills not all care staff may possess, and its row and column limits can constrain a growing care home.
- · Not a Clinical System: Excel lacks advanced features and mobile integration with specialised systems like NHS electronic health records.

Example

- During the COVID-19 pandemic, Public Health England missed nearly 16,000 test records due to Excel's row limit (La Polla, 2020)
- Scenario:
- Two staff members at Sunrise Care Home updated the same Excel file on different computers. When they saved their changes, one person's work overwrote the other's, causing important information to be lost



Source: by design accessed on
3rd October 2025

MS Teams Operation- Benefits

- Centralised Communication: MS Teams replaces phone calls and paper notes with a unified platform for chat, video calls, and meetings (Varsi et al., 2021).
- Improved Care Coordination: It facilitates seamless shift handovers and staff updates, ensuring all team members are informed (Varsi et al., 2021).
- Training & Collaboration: Teams can host training sessions and share learning materials. Quick questions can be asked via chat without interrupting colleagues.



- A nurse ending their shift can leave a detailed written update in the Team channel.
- Scenario:
- MS Teams enables the manager to swiftly share updated guidelines with all nurses, who can instantly access and review the information (Varsi et al., 2021).

Example

Document Sharing & Storage: Staff can securely share policies, care plans, and reports in one place, reducing the risk of lost paperwork.

Task Management: Built-in tools like Planner and To-Do help assign and track tasks.

Integration with Other Apps: MS Teams integrates with Microsoft 365 apps (Word, Excel, Outlook) and third-party tools.



MS Teams Operations – Limitations

- Digital Literacy: Some staff may lack proficiency with all of MS Teams' features, which can hinder effective use (Xia et al., 2020).
- Internet Dependency: Uneven internet access or slow connections can disrupt real-time communication.
- Ongoing Training & Support: Continuous training is needed to keep up with updates and technical issues. IT support must be readily available (Xia et al., 2020).
- Technical Limitations: MS Teams can have high CPU usage during large meetings.
- Data Management: Usage can lead to a rapid accumulation of files, increasing storage costs.
- User Overload: Constant notifications and chats can overwhelm staff, leading to distraction.



Scenario

- During a critical care coordination meeting, Nurse Ali tries to share a patient's records via MS Teams, but the internet connection is slow, causing delays (Xia et al., 2020).

Highlights

- Keep resident records safe, confidential and updated. Use MS Excel to store health, medication and appointment information (Bail, 2022).
- Use Excel charts and reports to see patterns. Limit access to sensitive information based on staff roles.
- Use cloud storage to avoid losing data (LaPolla, 2020).
- Communicate with staff: Use MS Teams for shift changes, updates, and important messages (Varsi et al., 2021).
- Train staff on digital tools: Teach staff to use digital tools; regular training sessions on cybersecurity (Xia et al., 2020).
- Backup data regularly.
- Device Security – Lock devices when unattended; install antivirus and security updates.
- Staff must use strong passwords and two-factor authentication for all accounts.

Reference (Havard Style)

- Benefits: Bail (2022)
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- Limitations: La Polla (2020)
- La Polla, F.W.Z. (2020). Excel for data visualization in academic health sciences libraries: A qualitative case study. *Journal of the Medical Library Association*, 108(1), pp. 100–110.
- Benefits: Varsi et al. (2021)
- Varsi , C., Solberg, M., Øystese , K.A., Børøsund , E., Eide, H. and Finset, A. (2021). Health care providers' experiences of using a communication tool for team collaboration in the care of patients with chronic conditions: A qualitative study. *International Journal of Environmental Research and Public Health*, 18(18), 9671.
- Limitations: Xia et al. (2020)
- Xia, B., Watkins, I., Golbeck, J. and Hung, M. (2020). Understanding and improving older adults' digital literacy: A review of the literature. *ACM Transactions on Computer-Human Interaction*, 27(4), pp. 1–31.
- Slide 8: Conclusion
- Implementing MS Excel and MS Teams at Sunrise Residential Care Home can lead to significant improvements in operational efficiency, communication, and resident care. While challenges such as staff training and technical limitations exist, the benefits for both staff and residents make digital adoption a valuable step forward (Bail, 2022; Varsi et al. 2021)

Conclusion

Implementing MS Excel and MS Teams at Sunrise Residential Care Home can lead to significant improvements in operational efficiency, communication, and resident care. While challenges such as staff training and technical limitations exist, the benefits for both staff and residents make digital adoption a valuable step forward (Bail, 2022; Varsi et al., 2021)

Source :Design accessed 4th
October 2025

