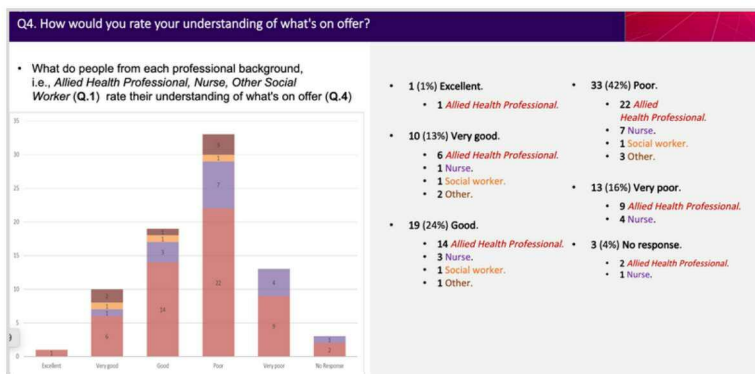


Analysis of Technology Enabled Care (TEC) in Adult Social Care – Manchester City Council

**Better Outcomes Better Lives, TEC in Adult Social Care**

Rimsha Afzal Kausar | BA (Hons) **Sociology and Spanish**



An example of a PowerPoint slide in which I presented the data I analysed

## Overview of the Data Fellowship

The Manchester Adult Social Care services are part of a large-scale and ambitious change programme, named Better Outcomes Better Lives, aimed at promoting independence and wellness in residents who require social care support. A key part of this change program is the integration of Technology Enabled Care (TEC) to support care needs and delivery. This approach utilises assistive technology to enable individuals to live in their own homes for as long as possible while enhancing their safety. By utilising TEC, the need for formal care and support is reduced, and there is a decrease in the number of home visits from professionals, making the process less intrusive for residents.

Having completed an 8-week data fellowship at Manchester City Council, I was able to develop my quantitative skills through hands-on experience, focusing on research and analysis of existing datasets to determine the potential for TEC in Adult Social Care services. My work was centred around answering critical questions such as the current usage of TEC among care service users, their specific support needs and characteristics, the types of TEC they use, and the associated costs.

## Data Analysis

During my internship, I had the opportunity to work with large data sets from seven distinct surveys as part of my data analysis responsibilities. To effectively manage and analyse the data, I utilised various Excel tools, including identifying and eliminating duplicates, recoding open text fields to fit specific categories, and creating efficient pivot tables. These efforts were necessary to ensure the accuracy and reliability of the data.

To present the results of my analysis in a clear and visually appealing manner, I produced compelling visual representations, such as summary tables and graphs. These visual aids were crucial in highlighting key findings and patterns within the data. In addition to working with the numerical data, I actively searched for noteworthy quotes and impactful stories from the survey responses. These were incorporated into the evaluation report to provide a deeper understanding of the data and its real-life implications.

My contributions were not limited to individual data sets, as I also integrated two different data sets to produce a comprehensive analysis. This analysis was used to inform subsequent reports and presentations, in which I utilised Word and PowerPoint to effectively convey the research findings and recommendations. This experience allowed me to further develop my communication skills and effectively convey complex information to a variety of audiences.

One of the highlights of my internship was designing, developing, and implementing a data-gathering survey using Smart Survey for the transition team. In collaboration with my team members, I created 48 comprehensive and tailored questions that effectively captured insights from the target population. This project required critical thinking skills, as I proposed enhancements to improve data collection and streamline analysis processes.

In addition to my data analysis skills, I also utilised my report-writing abilities to critically evaluate literature, identify and define problems, outline the benefits and drawbacks of the technology-enhanced curriculum (TEC), and summarise research and findings for both academic and non-academic audiences.

## Findings

- 34 (43%) of the respondents had never heard of the variety of TEC products and equipment that are available to the residents of Manchester. Similarly, 58 (73%) of the respondents said they were unsure of where to look for resources and information on TEC tools and products. Therefore, it would be advantageous to have a live or recorded session for the practitioners to help them become aware of all the products and equipment accessible, as well as how to obtain pertinent knowledge and resources.
- The lack of referrals for TEC services was mentioned by 54 (69%) of the respondents as being primarily the result of their lack of understanding of TEC and the referral procedure. However, as stated by 55 (70%) of respondents if they were better informed on the variety of TEC equipment available, including associated expenses and the referral process, it would help to improve the number of referrals they make.
- Other barriers to referral include respondents' uncertainty about the cost and ability of individuals to pay 38 (36%), the uncertainty if the individual would be able to use TEC 24 (23%) and that Individuals will decline to TEC 15 (14%).

## Key Skills Learnt

- During my 8-week internship, I significantly improved my quantitative skills. I am now able to effectively analyse and present data by summarising and standardising information for easy comparison.
- Through training conducted by senior analysts, I mastered various Excel formulas to clean, visualise, and analyse complex and qualitative data.
- I enhanced my proficiency in Google Sheets, Excel, and Microsoft Office applications to generate tables, graphs, and pivot tables.
- I effectively managed my time by balancing multiple tasks and working with different teams on various projects, consistently meeting deadlines with minimal supervision.
- I actively participated in 12 optional meetings to gain a comprehensive understanding of the inner workings of the council and different teams. By engaging with members of the homelessness, education, and HR teams, I deepened my knowledge of their roles and responsibilities and gained a better understanding of their functions.
- I gained valuable knowledge about local policymaking and its potential to positively impact the lives of millions of citizens.
- Lastly, I had the opportunity to sit on the panel for the Awards of Excellence, where I assisted in selecting the winners for four different categories by reading nominations, scoring them, and justifying my decisions.

[illegible]

An example of one of the data sets after conditional formatting.