

Case study



# Bringing digital and data skills into the profession:

A Perspective from an early career occupational therapist (OT)

Anya de longh  
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### About Anya

Anya qualified in February 2022 from the University of East Anglia (UEA) MSc course and became an HCPC registered Occupational Therapist (OT). Before venturing into the world of OT, Anya had worked in the NHS for around ten years, both locally in Dorset and nationally around patient leadership and personalised care, specifically supported self-management. This all stemmed from her experience as a patient and significant illness in her early twenties. She has been grateful for a broad range of experiences, including in strategic and service development roles, which she has been excited to bring to her profession.

### About the innovation

Anya joined Ayrshire & Arran NHS, on a new project funded by the South Ayrshire Health & Social Care Partnership tasked with providing early interventions for older adults who were becoming frail, and at risk of falls and other complications. Since joining the team, Anya has championed the use of data to help identify appropriate patients for early intervention and develop a proactive approach.

This has involved the use of the electronic Frailty Index (eFI) which pulls data from GP clinical systems to identify patients who could be classed as moderately frail based upon coded conditions in their medical notes (such as COPD, visual impairment, or impaired mobility). Anya runs

reports from the GP clinical system, and then exports the patient list into Excel ready for further screening.

Anya utilises functions with Excel and works her way through the report, in conjunction with viewing information from both the clinical systems available to her (EMIS PCS for GP records and EMIS Web for local community services). Exclusion criteria help to guide appropriateness for the service (e.g., significant recent involvement from AHP's, residency in a care/nursing home or upcoming surgery). Reviewing clinical records in this way allows her to utilise clinical judgement as well as indications from data. Many conditions such as poor mobility are under-coded on GP records, meaning other sources of data within clinical records are important to gain a full picture if an early intervention service would be appropriate.

Once patients are identified as appropriate, Anya manually generates a letter that introduces the service to them. Data points such as patient age, help indicate if personalisation of these letters is required. A follow-up call is then made to the individuals after two weeks and the uptake rate of intervention sits at around 45%. A recent development has been to work with administrative colleagues within the practice to get the letter template embedded within the EMIS PCS system, meaning name and address fields get auto-

populated, saving around 5 minutes per letter, reducing the risk of information governance-related errors, and further streamlining the process. This will also make it more scalable for other team members in other practices locally.

Interventions that are subsequently offered following frailty assessment include:

- falls prevention education
- equipment prescription
- onwards referrals
- social prescribing and signposting to local community and voluntary sector resources
- brief interventions around anxiety low mood or pain and fatigue
- coaching approaches to support people to work towards their own goals and discussion of information needs to maximise health literacy

The outcome and effectiveness of the service is evaluated using several different measures: Indicator of Relative Need 2 to capture the impact on ADLs; EQ-5D to capture patient-reported

quality of life; and Self-Management Ability Scale (SMAS) to capture broader confidence around self-management confidence. In time, the service is hoping to work with colleagues internally within Ayrshire & Arran to look further into the health economics of the work, and utilisation of other services in the longer term.

### What data and digital tools were required?

Data to facilitate efficient identification of appropriate patients for this early intervention service:

- clinically coded (structured) data is gathered within the eFI tool, and a report configured with appropriate parameters to identify patients of 'moderate frailty'
- reports that can be run and exported into Excel for analysis.
- data point included: CHI number
- manually combined with other data (structured and unstructured) from clinical records including recent interventions from AHP teams, recent admissions, or interactions with primary care

Digital tool	Benefits
Electronic Frailty Index (eFI) – electronic tool	<p>Utilising coded data already submitted to a clinical record.</p> <p>Enables automatic identification of patients based on set parameters.</p> <p><b>Potential challenge:</b> reliant on accurate data entry and appropriate coding, individual professions may include differing items based on clinical focus, limiting scope of identification.</p>
EMIS PCS and EMIS Web Clinical System (2 versions - GP and Ayrshire & Arran Community)	<p>Accesses across both community and GP records allows for a more rounded picture of patient history and circumstances.</p> <p>Allows visibility of other input from services, or other flags/indicators of need.</p>

<p>Microsoft Excel</p>	<p>Mainstream software and many organisations will provide in-house training on its use.</p> <p>Allows for manipulation of data into appropriate views using formatting, sorting, and filtering.</p> <p>Many additional tools for managing the data are readily available just as Lookup and Pivot tables. Allows the user to hide or add data fields as required, for example adding a column for notes or clinical decisions alongside the patient data.</p>
<p>Remote desktop</p>	<p>Allowing secure access to systems that would not otherwise be available off site, e.g., accessing a system remotely when with patients or working at home.</p>
<p>Electronically created process map (Anyta utilised Microsoft PowerPoint)</p>	<p>Creating a visual of a process can help ensure clarity and consistency amongst members of a team, as well as to support explanations to outside agencies.</p> <p>It can be easily updated without the need for full reproduction.</p> <p>Specific software is available at a licence fee, but several mainstream products can allow you create such resources.</p>

## Benefits of the innovation

Patient	Occupational Therapy and the Organisation
<p>Early identification and proactive intervention can reduce the risk of future crises e.g., preventing falls</p> <p>Reduces the chance of future incidents that could have had a greater impact on the patient e.g., injury/hospital admissions</p> <p>Early engagement with Occupational Therapy allows for development of rapport and trust. Early introduction of interventions that may help prevent, or prepare for, escalation of interventions in future</p>	<p>Improves efficiency and effectiveness through the combination of targeted use of data with clinical judgement.</p> <p>Improved relationships with primary care providers, increased trust, and collaborative working.</p> <p>Reducing the impact of incidents that could have been prevented e.g., falls that resulted in admissions, more intensive or more expensive interventions.</p>

<p>Delivering timely intervention to patients who may not engage with services to be identified and referred.</p>	<p>Improved flow of patients through a service by proactively identifying them rather than waiting for awareness of service to increase and referrals to gradually build.</p> <p>Naturally building case examples and capturing outcome data from very early on in new service provision. Helps to reinforce purpose of service to referrers to lead to subsequent appropriate referrals coming through.</p> <p>Demonstrates the value of Occupational Therapy for this population and differentiates it from other support services available.</p>
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## Digital and Data Competencies

From the AHP Digital Competency Framework (HEE 2020) (Paraphrased for conciseness, please see framework for full details).

### Domain 1: General

- Use of digital/online resources for obtaining/sharing information
- Foundational computer skills
- Demonstrate values and behaviours that embrace digital and technology innovation

### Domain 2: Data Management and Clinical Informatics

- Locate, access, visualise and evaluate data for quality improvement
- Knowledge and understanding of the benefits and implications of data sharing
- Knowledge and understanding of clinical informatics and how data can assist with planning and modelling of services and pathways

### Domain 3: Records, Assessments and Plans

- Awareness of different types of data and clinical coding and terminologies e.g., diagnosis and procedures
- Knowledge and understanding of data quality

### Domain 8: Decision Support

- Knowledge and understanding of digital tools to direct patient pathways
- Knowledge and understanding of algorithms to indicate risk or clinical need

### Domain 10: Meta-competencies

- Build relationships with key stakeholders for transformation
- Using digital technology as part of Quality Improvement
- Awareness of external drivers for change

## Engagement in Career Development

From the Career Development Framework (RCOT 2022) (Paraphrased for conciseness, please see framework for full details)

### Professional Practice

- Actively listen and seek views of those who access services
- Be open to change to consider ways to work differently across the system
- Embed the evaluation of impact into practice
- Appropriately developing the scope of professional practice to create new ways of working

### Leadership

- Consider and propose alternative ways to get the job done without compromising service quality and recognising and seeking to influence a change in culture where needed.
- Develop new partnerships and effectively make use of existing partnerships with others across organisational and agency boundaries.
- Use a range of communication styles, adapting as required to influence, advocate for, and promote occupational therapy within and beyond the profession.
- Know the current strategic policy drivers that shape services and use them to inform own work.
- Seek opportunities to pioneer innovations, experiment and take supported risks to ensure safe and effective service provision.

### Impact already seen

In total to date (over 8 months of the project), 86 patients have been seen, 36 of those from screening, 26 from direct GP referral and the remainder by self-referral or other routes. 58% of those screened from the moderately frail list were eligible for the service - highlighting the high proportion of patients who are moderate frail but are yet to have any OT input. Of those attempted to contact via letter, 45% have accepted the service, also highlighting an unmet need, and one that isn't addressed through reactive services at present.

### Lessons learned

- As everyone always says, relationships are key to working in healthcare, but what no-one really says is how much easier those relationships are to build when you've got data to back up what you are saying, prove your impact and build trust so the referrals then flow.
- Be patient, but good pro-active data strategies like this can speed up that inevitable wait for referrals at the early stages of a new service.
- Keep a log of everything, so you can go back and look at the PDSA cycles and see how far you have come and communicate your 'journey'.
- Our clinical systems are super powerful, and we probably aren't using them to their full potential – make friends with the person who knows how to use the system inside out to get the most from it.
- There are often clever bits of software systems (that cost £) that generate much more nuanced reports, but nothing beats an Excel spreadsheet, a passion for service development and just getting on with it, proving it works and building the case!

### Words of wisdom

'If you like data, spreadsheets and all that entails, then you might feel that this is something that isn't always shared widely within the OT community. I have days when my interest and passion for data makes me feel at odds with the general 'style' of OT and OT thinking. But when you can use it to clearly articulate what OT can offer, beyond the general 'wellbeing' jargon that any other health service could use, it will be worth it. When communicating outside of our OT bubble, data is a common language among professionals in a medical system, so it really helps. It doesn't mean you can't be person-centred either - the two are not

mutually exclusive. Everyone always says how each member of the team brings something different to the table, and if an appetite for data is what you bring, don't let anyone make you feel embarrassed about it. Own it and embrace it. Even if it feels like data isn't prioritised.' - Anya

'In OT we often talk about doing, being, belonging and becoming. By doing the data work, you can be a better OT. And although you might not feel like you belong, you do!' – Anya

## The next steps

This will involve access to the data from both the Social Care record system and the Mental Health record systems to allow for more holistic screening of patients against appropriate criteria.

Sharing the process and benefits of this practice to empower other OT's (local and elsewhere) to utilise data and digital tools to develop a proactive frailty service in parallel to responding to referrals from primary care staff.

Hear more from Anya as part of a series of Data and Innovation focused pre-recorded Webinars available on the RCOT Data and Innovation strategy webpage.

## Authors

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