#### ABSTRACT

The North West Endoscopy Academy (NWEA) is committed to ensuring endoscopy training is of a standardised high quality that is multidisciplinary. It seeks to address the historic lack of admin training by providing a Core Admin & Clerical (A&C) Skills in Endoscopy course for all A&C staff. The competency framework used for this training is the first developed specifically for A&C staff in Endoscopy and the early indications are that it has significantly contributed to the efficacy of a unit's performance, highlighting that greater focus should be placed on providing these opportunities to A&C staff in the future. This article will explore the aims and methodology of the course and present evaluation data to discuss the successes and future recommendations. We have used a combination of teaching methods, such as small group work, case study analysis and traditional classroom teaching to provide an education programme which seeks to underline existing best practice and introduce new themes and ways of working. Our two-tiered evaluation has shown this approach to be effective, in the future we intend to implement a further evaluation to establish the long-term added value of the training. In combination we will begin work on advanced skills modules aimed at supervisory and management staff.

# **BACKGROUND**

Endoscopy training centres were first established in 1995, with the Mersey School of Endoscopy (MSE) being the first full-time national training centre in the UK. The MSE is based within the Liverpool University Hospitals NHS Trust and has endoscopy training units based at the Royal Liverpool Hospital, Broadgreen Hospital and University Hospital Aintree sites. Since founding, the MSE has delivered a professional and valuable service both across the region and nationally to thousands of delegates. However, there is a lack of role-specific training and professional development formally offered to the admin and clerical (A&C) staff group within Endoscopy.

The publication of Sir Mike Richards' independent review of diagnostic services in England [1] evidenced the need to support the A&C workforce and highlighted the disparity in training. It discussed the need for role-specific training across all staff groups but specifically highlighted the need to ensure admin colleagues are supported with the skills and knowledge required to deliver an effective service whilst combatting low retention levels and an ever-increasing demand for services. The North West Endoscopy Academy (NWEA) has established a "Hub and Spokes" model for course development in order address this [2]. Each "Spoke" has an area of focus and will lead and coordinate on programmes of training for the whole of the North West. The MSE is the Hub Centre for the region, coordinating all academy education provision and is responsible for developing and coordinating the A&C training programme across the North West region.

# **DEVELOPMENT**

The MSE joined a collaborative working group who had been tasked with developing a National Competency Framework for Band 3 Endoscopy Booking Clerks; the partners in this were NHSE South West Region, NHS London Region, Cheshire and Merseyside Cancer Alliance/Network and Four Eyes Insight Ltd [3]. Consequently, A&C training could be benchmarked against this competency framework to provide colleagues with the necessary role specific training. Colleagues from the South West Endoscopy Training Academy (SWETA) and Four Eyes Insight Ltd. led on the development of these competencies. Workshops and engagement events around the regions were established to gain feedback from the Endoscopy workforce, for instance 'what the perceived skill gaps were within endoscopy teams' and 'what benefits they would like to see as a result of these courses'. Once finalised, the MSE developed the 'Core Admin & Clerical Skills in Endoscopy' course which was

designed to be accessible to all tiers of Endoscopy staffing, and with its learning objectives (LOs) following the six core competencies from the collaboration with SWETA and Four Eyes (Table 1) [2].

**Table 1**Core competencies for admin and clerical staff in endoscopy.

No.	Competency	Summary description			
LO1	Endoscopy knowledge and skills	<ul> <li>The endoscopy staff member will competently display knowledge and skills of endoscopy services and their makeup. It is about ensuring that Booking and Scheduling staff understand national priorities, targets, and their relevance to booking procedures and points system.</li> <li>The individual will understand the Join Advisory Group on Gastrointestinal Endoscopy (JAG) accreditation process and Endoscopy Global Rating Scale (GRS) standards to support audits.</li> </ul>			
LO2	Productive teamwork and cooperation	<ul> <li>The administrative workforce person will competently display knowledge and skills in developing working relationships with colleagues, that are productive in terms of supporting and delivering your work and that of the overall endoscopy.</li> </ul>			
LO3	Planning and communication	<ul> <li>The endoscopy staff member will competently plan and organise their work safely and with efficiency.</li> <li>The endoscopy staff member will competently communicate information using a variety of techniques and flexibility to adapt the communication in response to feedback and ensure people have received and understood the information.</li> </ul>			
LO4	Supporting patients and carers	<ul> <li>The endoscopy staff member will ensure that patients are put first. The endoscopy's vision, values, processes, and systems, for example, should all be clearly driven by and geared to satisfying patient needs.</li> <li>The individual will have the ability to meet patient service needs and expectations and provide excellent service in a direct or indirect manner.</li> </ul>			
LO5	Conducting booking and scheduling effectively	<ul> <li>The endoscopy staff member will competently display expert knowledge and skills of endoscopy booking and scheduling, procedures, points system and reasons for booking.</li> <li>The individual will deliver outputs that meet patients' needs and stakeholders needs.</li> </ul>			
LO6	Developing resilience and influence	<ul> <li>The endoscopy staff member will competently display a high level of performance when facing pressure and uncertainty and be able to remain calm, confident and to respond</li> </ul>			

logically and decisively in difficult
situations.
<ul> <li>The individual will have the ability to</li> </ul>
influence change.

Additionally, as a result of a patient complaints and compliments review at Liverpool University Hospitals NHS Foundation Trust, a Care Navigation element was included. Whilst specific Care Navigator roles were not the focus of the training, the principles of actively listening, signposting patients to, providing advocacy and support for patients as needed, as well as encouraging patients to take a more active role in their own healthcare were directly applicable. There was no expectation on A&C staff to absorb additional duties into their role, but rather adapt the style of the delivery of their roles to reflect these principles as a continuous process. Realistic scenarios were created by a Practice Education Facilitator, Janine Carey, which reflected both the most positive and negative elements of patient feedback; this is incorporated as a continuous thread throughout the training via a discussion of 'Jack' and his experience as a patient as he moves through the process of undergoing an endoscopic procedure (Figure 1). Case studies are effective training tools and are found to be utilised across medicine [4], endoscopy [5] and admin [6].

## Figure 1

'Jack' - a simulated patient and his medical history.

This scenario offers a lot of endoscopy specific discussion points. The use of clinical abbreviations enables discussion around accessibility of language [7], of medications and effective team communication. "Jack" is also utilised to inform a discussion around consent and cooperation; in a later development of the scenario, it becomes clear that "Jack" is reliant on his daughter to record detail of and transport him to/from appointments, allowing for discussion of the responsibilities towards carers as well as patients, alongside other issues such as confidentiality and supporting those with additional needs.

# **DELIVERY**

Each learning objective had a dedicated session to aid its achievement. The course began with a mapping exercise for issues in current working practice, making clear commonalities visible to all learners. This was found to increase engagement and cross-unit discussion as it reassured staff that they were experiencing shared problems. The recurrent issues are then made into focus points for learning, with potential solutions and approaches being discussed at the end of the day. For LO1, a group discussion around JAG and general endoscopy knowledge (such as targets, procedures and job roles) was important to reinforce the theme that full-service understanding enhances full-service experience for staff and patients - for example, an issue in decontamination will present as an issue for admin staff. For LO2, discussions around communication and visibility across multi-disciplinary meetings in the care group/directorate reinforced the importance of productive teamwork and cooperation. Wider communication work is then discussed for LO3, looking at how admin staff communicate with patients and colleagues. Case studies such as in Fig. 1 are utilised to underpin the importance of reaching a shared basis of understanding with patients at the earliest point by adapting communication style with consideration of the Accessible Information Standard [4], and healthcare inequalities within the patient demographic whilst maintaining themes of care navigation and non-subscriptive terms. Furthermore, the interpretation of information and responsibilities towards carers are focused on for LO4. Discussions around conflict resolution techniques and reassurance are important for admin staff to understand what the limits are before breaching confidentiality. Thus, confidentiality is discussed as a theme, highlighting recommendations that

admin staff should follow a patient through their endoscopy journey. This supports understanding and allows admin staff to limit impact on nursing colleagues by enabling them to answer generic, non-medical questions. LO6 is achieved through discussion of the service demands - 130% capacity recruitment plan and 12-15% service growth every 2 years - and recognising that achievement. Resilience is the final thought of the day, with discussions focused on different techniques and support that can help admin staff when working in an emotionally demanding workplace. Postcourse, LO5 is achieved by completing an online module for booking and scheduling via elearning for healthcare (eLFH), although the principles of effective booking are a recurrent theme throughout the day. Considering the different systems and different levels of compliance with the Paper Free initiative at individual Trusts, it was not deemed viable to focus an entire session on procedural process. To do so we would be forced to demonstrate using an individual system and therefore massively limit the effectiveness for the majority of attendees who do not use it. The most challenging aspects included building a faculty and incorporating career enhancing elements to make career progression more likely. There was no requirement for A&C staff to attend – nor on their managers to reduce capacity to enable their attendance. This model of training has been designed to enable maximum impact for A&C staff whilst remaining balanced against the amount of time units are able to commit on behalf of their staff; while study leave and Trust funding for places on educational courses are not officially earmarked for nursing and medical staff, the reality is that these provisions are at best dominated by and at worst exclusively reserved for those staff groups.

To overcome these potential barriers, an extensive "hearts and minds" campaign was implemented. Local Integrated Care Boards (ICBs) – including Cheshire & Merseyside, Greater Manchester, and Lancashire & South Cumbria – provided support to engage business managers from regional Trusts to highlight the benefits of the course and staff retention, and the importance of addressing the previous dearth of training offered to A&C colleagues. Feedback from these meetings was positive, and it was clear that there was a desire to recognise the efforts of A&C teams and provide staff with a credible accreditation to support internal career progression, whilst also understanding the benefits of team efficiency and the prospect of meeting with staff from other Trusts to discuss approaches taken to tackle shared issues.

In order to gain accreditation for the course and overcome barriers to career progression, the MSE engaged with Continuing Professional Development UK (CPD) as the industry leader in the provision of certification to high-quality educational programmes. As such, courses which carry CPD accreditation are universally recognised and validated within the NHS and by the governing bodies of relevant staff groups (NMC, AHPC, GMC, etc.). Historically, CPD is a difficult element for A&C staff due to the absence of role specific training. Places on generic internal courses such as the Institute of Leadership and Management (ILM) are limited and time intensive which typically leads to management refusal of support for attendees. These courses are also built towards moving into management rather than progression within a role. CPD accreditation thus provided the final elusive element of the course which carries a real and tangible benefit to the delegates, enabling recognised and role specific accreditation from a reputable source.

### **EVALUATION**

An evaluation strategy was designed following the Kirkpatrick's four levels of training evaluation model which is used to determine a training program's effectiveness [8] and has been utilised for evaluating training programs across various healthcare specialities [9; 10; 11]. Level 1 has three components and evaluates the reaction of the trainee: the degree to which participants find the training favourable, engaging, and relevant to their job. Level 2 has five components and evaluates learning: the degree to which participants acquire the intended knowledge, skills, attitudes, confidence, and commitment based on their participation in training. Level 3 evaluates behaviour of

the trainee: the degree to which participants apply what they learned during training when they are back on the job. Level 4 evaluates the results of the training: the degree to which targeted outcomes occur because of the training, support and accountability.

Levels 1 and 2 were combined and involved a two-tier evaluation designed to monitor the level of confidence endoscopy A&C staff have in their competence and knowledge of their role. The first tier was sent to delegates at the beginning of the course, with the second tier sent out immediately following attendance and was designed to highlight the quality of delivery and content on the course day. This enabled the MSE to make changes to their delivery approach and the content materials to reflect where delegates see the most value. Level 3 involved a further evaluation survey sent to attendees one-month following attendance to feedback on their colleague's ability to implement the learning.

Both are short five-to-ten-minute questionnaires circulated via email following creation on Microsoft Forms. The initial evaluation asks delegates if they have interest in joining the faculty of NWEA to deliver and develop future A&C focused courses. By doing this, potential candidates can be identified which supports the principle of a diverse cross-regional faculty group from which trainers can be drawn from and deployed on a voluntary basis to deliver courses. Again, this reflects those principles that the Academies, and the Training Centres before them, held in terms of collaboration and utilisation of highly skilled colleagues able to act as subject matter experts to support training. Furthermore, it offers another approach in which the course structure aims to support the career progression of delegates whilst also ensuring the viable long-term sustainability of the NWEA A&C offer.

A third and final evaluation form (level 4) will be sent to delegates at six months post-course and aims to gauge the long-term value added in the workplace. Furthermore, a case study will be undertaken on endoscopy units with high levels of engagement. This will involve using unit data to review measurable productivity and utilisation rates - such as levels of stress related illness, do not attend (DNA)/cancellation rates, waiting times, frequency of patient complaints and staff survey responses – as well as conducting focus group interviews with a cross-section of the A&C staff.

### **OUTCOMES**

There have been three courses to date at the following locations:

- 12th June 2023 at The Lancaster Royal Infirmary (19 delegates)
- 20th July 2023 at The Manchester Royal Infirmary (10 delegates)
- 2<sup>nd</sup> October 2023 at The Mersey School of Endoscopy, Royal Liverpool University Hospital (14 delegates)

Level 1 and 2 evaluation results (Table 2) are from 43 delegates who attended over the 3 courses from the following Trusts:

- Blackpool Teaching Hospitals NHS Foundation Trust
- East Lancashire Hospitals NHS Trust
- Lancashire and South Cumbria NHS Foundation Trust
- Liverpool University Hospitals NHS Foundation Trust
- Mersey and West Lancashire Teaching Hospitals
- Mid Cheshire Hospital Trust
- Manchester University NHS Foundation Trust
- Royal Bolton Hospital, Bolton NHS Foundation Trust
- Tameside & Glossop Integrated Care NHS Foundation Trust
- University Hospitals of Morecambe Bay NHS Foundation Trust

- Wirral University Teaching Hospital NHS Foundation Trust
- Wythenshawe Hospital, Manchester University NHS Foundation Trust

**Table 2**Average self-reported confidence levels and comments from Level 1 and 2 evaluations.

	Self-reported confidence levels						
Core Competency	Pre- Course	Post- Course	Impact	Pre- Course	Post- Course	Impact	
	Score	Score		8/10+	8/10+		
AD 1 Endoscopy	6.40/10	8.52/10	21.2%	31.5%	80.7%	49.2%	
Knowledge & Skills							
AD 2 Productive	8.39/10	9.08/10	6.9%	73.9%	90.2%	16.3%	
Teamwork & Cooperation							
AD 3 Planning &	8.03/10	8.86/10	8.3%	67.6%	88.5%	20.9%	
Communication							
AD 4 Supporting Patients	7.40/10	8.44/10	10.4%	51.8%	78.2%	26.4%	
& Carers							
AD 5 Conducting Booking	8.11/10	8.71/10	6%	63.9%	83.9%	20%	
& Scheduling Effectively							
AD 6 Developing	6.38/10	8.48/10	21%	31.1%	78%	46.9%	
Resilience & Influence							
Trainer Performance	N\A	8.92/10	N\A	N\A	78.75%	N\A	
Content Evaluation	N\A	8.38/10	N\A	N\A	72.88%	N\A	
Would Recommend the	N\A	97.67%	N\A	N\A	N\A	N/A	
Course to a Colleague.	•		,		,	,	
Would Attend Future	N\A	97.67%	N\A	N\A	N\A	N\A	
NWEA Courses.	•		,		,	,	
Would be Interested in	N\A	27.91%	N\A	N\A	N\A	N∖A	
Becoming Faculty.	•		,	,	,	,	

**Delegate Comments** 

Trainer was excellent, involved all members on the course and encouraged participation.

It was refreshing to do a course with other endoscopy booking clerks talking about how each hospital is coping with the

Mike has a gentle energy, he managed to put the group at ease and re-focus our group when needed, without being forceful or aggressive. Overall, I felt the training was informative and worthwhile.

He was very informative and extremely helpful. Nothing to add.

Course was enjoyable and delivered well.

Brilliant course, very useful and helpful, delivered without any problems.

The trainer engaged well and involved the audience which broke up the day including the activities.

The content of the slides was high quality and informative. The overall feel for the day was that the teams felt benefit from coming together.

I attended as part of the ICB to understand how the session went for staff, I've had lots of positive feedback since the training which is great, Michael was really friendly, approachable and I thought he previously worked in Endoscopy with the way he connected with staff and his knowledge!

The course was very informative. I think it would be very useful for new starts into the waiting list at Endoscopy. It was great to see the other sites and how they work.

I had no issues. It was a relaxed atmosphere, and we were able to discuss topics with other colleagues from different trusts.

Mike did really well considering it was his 1st Admin and Clerical course, he was easy to listen to, friendly, approachable, majority of course was applicable in our role, he also made course fun.

Very engaging, knowledgeable about the subject. very approachable and receptive to other point of views and suggestions. considering this was a new type of course and his first time He did very well

Overall, the course was informative. I really enjoyed great discussions and interactive tasks.

Positive Feedback- Good communication skills with the trainer and team that attended, good resources for example scripts, post it notes, exercises, good breaks throughout to sit and take in the information alongside active participation in thoughts, exercises etc.

Really enjoyed the activities in the first half of the day and comparing ideas and processes across different trusts and hospitals and engaging in some interesting discussions.

Course was helpful in my role as Ward clerk, it was good to listen to staff from other hospitals and how they deal with their Admin and clerical role on daily basis.

It came across from all staff on course that good communication skills are so important, being approachable, helpful, understanding of patients' anxieties about procedures, great empathy.

We were kept hydrated during course lunch provided was lovely, only complaint was banging door on corridor maybe a door stop is needed.

Getting the perspective from different trust was enlightening

According to delegate feedback, the course has had significant impact in each of the six core competencies. The most significant gains are made in the spheres of AD1 and AD6. The impact on those scoring themselves an eight out of ten or above for all competencies is particularly pleasing because it indicates delegates are leaving the course feeling extremely confident in providing a top-class service for their peers and patients. Similarly, the trainer's performance and the overall content of the course fall into top-tier bracket of scoring.

Roughly one quarter of attendees expressed interest in joining the MSE's faculty. A Train the Admin & Clerical Trainers (TACT) Course will be delivered from March 2024, and it is these people who will be targeted in the first iterations of the course. This will be part of a wider governance process which will enable them to teach on the Core Admin & Clerical Skills in Endoscopy. In managing the TACT course in this way, the NWEA is confident in the sustainability of the delivery method.

It can be identified from the feedback that the learning outcomes, promotion of closer collaboration between Trusts and relaxed atmosphere intended are all reflected herein. The course was delivered using a variety of modalities including small group work, case studies, lecture-based learning, engaging activities and facilitated discussions. This was intended to support engagement throughout the day.

Level 3 evaluations (Table 3) have been collected from delegates who attended the June and July sessions (29 delegates). There is a natural element of diminishing returns on evaluations returned the further from the delivery date; the current response rate is 48%.

**Table 3**Median self-reported confidence levels and comments from Level 3 evaluation.

KPI	Pre-Course	Evaluation 1	Evaluation 2	Impact
	Median	Median	Median	
AD 1 Endoscopy Knowledge & Skills	6.50/10	8.00/10	8.00/10	+1.50
AD 2 Productive Teamwork & Cooperation	8.00/10	9.50/10	9.50/10	+1.50
AD 3 Planning & Communication	8.50/10	9.00/10	9.00/10	+0.50
AD 4 Supporting Patients & Carers	8.00/10	9.00 /10	8.00/10	+0.00
AD 5 Conducting Booking & Scheduling Effectively	8.00/10	9.00/10	9.00/10	+1.00
AD 6 Developing Resilience & Influence	7.50/10	8.00/10	7.50/10	+0.00

#### Comments

Please describe an example of a way in which you have been able to utilise the skills learned at the course into your current practice?

I implement all aspects of the course daily.

I have been planning and organising effectively. I have organised my emails by making folders for certain procedures or queries.

I have spoken to the nurses on the ward to ask for help/question, which I did not do before I went on the course.

I feel I am able /more confident to assist the Patient with any questions they may have.

We now have morning huddles to discuss any problems and to let the team know where available appointments are.

I was very new at booking, and it helped me with all aspects.

I believe it has boosted my self-confidence in doing my role as part of the team. It has encouraged me to take a more pro-active role in dealing with day-to-day challenges.

Increased confidence working within the team and speaking out.

We have many calls from patients wanting to discuss Bowel preparation, so I feel better understanding and confidence to able to chat to patients and help them with their queries.

As seen from the feedback, most topics have seen their scores maintain following attendance on the course. Similarly, the higher level of understanding is met on all but one of the learning outcomes. A certain level of decrease is to be expected a month on from the training. Therefore, the reduction in AD4 & AD6 at Level 3 was somewhat foreseeable. It is worth noting that the evaluation is attempting to measure delegate's confidence in their knowledge bases, as such they can be affected by how an individual is feeling on the day that they complete the form. This is an acceptable risk of the evaluation process; however, the expectation is that AD6 is most likely to be negatively impacted by this factor. For example, a respondent who has just had annual leave refused, or a service improvement idea rejected would naturally score themselves lower when considering the support for their resilience and/or their influence on their role than they may have done the day before.

Ultimately, the purpose of education at any level is to bring about worthwhile change. We feel the comments clearly reflect real successes, particularly the personal changes delegates have made ("I have spoken to the nurses on the ward to ask for help/question, which I did not do before I went on the course"), as well as more generalised themes of increased confidence and ability ("I feel I am able/more confident to assist the Patient with any questions they may have"). These can be viewed as a series of 1% gains which cumulatively contribute to a significantly more efficient service.

However, when considering the course aims and the general aim of education being to bring about worthwhile change, we have highlighted the following comment a real indicator of success: "We now have morning huddles to discuss any problems and to let the team know where available appointments are." This evidences a change made by the team to move in line with JAG best practice. It speaks to a higher level of immediate organisation, a focus on limiting the risk of empty appointments and is tied directly to several of the key learning competencies.

### CONCLUSION

There is clear and measurable value being added through the provision of the Core A&C Skills in Endoscopy course. The key areas of success are in supporting admin teams to better respond to patient queries – thus freeing up clinical time as nurses are required to have less preparatory contact with patients – and in improving full-service knowledge – enabling a more joined up and more easily navigable healthcare service. The demonstrable level of improvement across all learning points and the narrative evidence provided by delegates shows that the level of willingness to engage and implement the learning upon return to the unit following attendance is yielding tangible

improvement. Further evaluation conducted 6 months post-course will be required to establish the level of improvement, including any change in practice

In addition to the evaluation methods outlined above, we will also seek to gather more quantitative data around the overall impact of training to the unit. We are hopeful that the higher standard of patient interactions will result in fewer complaints in teams where the uptake of attendance has been high. Similarly, with a focus on resilience we would hope to see a reduction in stress related illnesses. Also, the focuses on enabling career progression and team culture should result in a higher level of staff retention. These will be reviewed in the longer term when a higher number of delegates have attended training. We have trained 90 delegates to date across the North West and project that this equates to roughly 45% of our band 3-4 staffing pool (the most common bands for Endoscopy Booking staff). Nationally, 6 A&C courses have been delivered across the South East and East of England to approximately 75 delegates with an additional 4 courses planned before the end of May 2024. This includes 2 courses which enables continuity of delivery after the NWEA steps back. We also have engagement with Pan Yorkshire and Northern to begin a similar project once the current agreements are concluded.

#### **COMPETING INTERESTS**

None declared.

#### **FUNDING**

None declared.

## **REFERENCES**

- [1] NHS England. Diagnostics: Recovery and Renewal Report of the Independent Review of Diagnostic Services for NHS England. 2020. Available from: <a href="https://www.england.nhs.uk/wp-content/uploads/2020/11/diagnostics-recovery-and-renewal-independent-review-of-diagnostic-services-for-nhs-england-2.pdf">https://www.england.nhs.uk/wp-content/uploads/2020/11/diagnostics-recovery-and-renewal-independent-review-of-diagnostic-services-for-nhs-england-2.pdf</a>
- [2] Haslam N, Collins P, Prendergast J, Murugesan S, Makin A. The Future of Endoscopy Training: A view from the North West of England. Gastrointestinal Nursing. 2023;21(Sup3). doi:10.12968/gasn.2023.21.sup3.s8
- [3] Capille J, Smaldon C, Dunckley P. P350 development of Endoscopy Administrative & Clerical Competency Framework. Poster presentations. 2023; doi:10.1136/gutjnl-2023-bsg.414
- [4] Korniichuk OY, Bambyzov LM, Kosenko VM, Spaska AM, Tsekhmister YV. Application of the case study method in medical education. International Journal of Learning, Teaching and Educational Research. 2021;20(7):175–91. doi:10.26803/ijlter.20.7.10
- [5] Soetikno R, Kolb JM, Nguyen-Vu T, Jayasekera CR, Bogie R, Yu J, et al. Evolving endoscopy teaching in the era of the millennial trainee. Gastrointestinal Endoscopy. 2019;89(5):1056–62. doi:10.1016/j.gie.2018.11.027
- [6] Schröter E, Röber M. Understanding the case method: Teaching public administration case by case. Teaching Public Administration. 2021;40(2):258–75. doi:10.1177/01447394211051883
- [7] NHS England. Accessible Information Standard Specification. V1.1. 2017. Available from: <a href="https://www.england.nhs.uk/wp-content/uploads/2017/08/accessible-info-specification-v1-1.pdf">https://www.england.nhs.uk/wp-content/uploads/2017/08/accessible-info-specification-v1-1.pdf</a>

- [8] Kirkpatrick JD, Kirkpatrick WK. Kirkpatrick's four levels of training evaluation. Alexandria, Virginia: ATD Press; 2016.
- [9] Akbari M, Dorri S, Sedeh M. Kirkpatrick evaluation model for in-service training on Cardiopulmonary resuscitation. Iranian Journal of Nursing and Midwifery Research. 2016;21(5):493. doi:10.4103/1735-9066.193396
- [10] Heydari MR, Taghva F, Amini M, Delavari S. Using Kirkpatrick's model to measure the effect of a new teaching and Learning methods workshop for health care staff. BMC Research Notes. 2019;12(1). doi:10.1186/s13104-019-4421-y
- [11] Campbell K, Taylor V, Douglas S. Effectiveness of online cancer education for nurses and allied health professionals; a systematic review using Kirkpatrick Evaluation Framework. Journal of Cancer Education. 2017;34(2):339–56. doi:10.1007/s13187-017-1308-2