

HEALTH PROFESSIONALS' FAMILIARITY AND PERCEPTIONS OF DIGITAL ADVANCE CARE PLANNING: A LATENT CLASS ANALYSIS

Digital record-sharing systems have been shown to improve the frequency and quality of advance care planning [1]. However, there is a lack of evidence relating to health professionals' familiarity and engagement with digitally-mediated approaches to advance care planning.

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FUNDING

This study is funded by the UK National Institute for Health Research (NIHR) [Health Services and Delivery Research (NIHR129171)].

INTRODUCTION

Electronic Palliative Care Coordination Systems (EPaCCS) are designed to support the documentation and sharing of care preferences of people living with chronic, progressive illnesses across England [2].

Commonly used for people with cancer, EPaCCS are part of a patient's electronic medical record where a health professional can update a patient's preferences for care following a discussion.

OBJECTIVE

We aimed to evaluate health professionals' familiarity with EPaCCS and their perceptions of the implementation processes for EPaCCS in routine care.

METHODOLOGY

An online survey was sent to health professionals in community and hospital settings in two regions in England where EPaCCS had been implemented across services (West Yorkshire and London). The survey consisted of questions about respondents' level of familiarity with EPaCCS and questionnaire items from the Normalisation MeASURE Development (NOMAD) tool. The NOMAD tool measures implementation processes from the perspective of professionals directly involved in the work of implementing complex interventions in healthcare. The NOMAD tool aligns with the four constructs of Normalization Process Theory (NPT) (i.e. coherence, cognitive participation, collective action, and reflexive monitoring). Questionnaire items relating to familiarity were rated from '0' (not familiar at all) to '9' (very familiar), with NOMAD tool items rated from '1' (strongly disagree) to '5' (strongly agree).

Latent class analysis was used to identify latent subpopulations across the study population relating to i) respondents' familiarity with EPaCCS, and ii) the four domains of NPT.

FINDINGS

We received 569 responses that represented all community and hospital settings involved in palliative care delivery for both regions. Of the 465 health professionals that were able to access EPaCCS, 43% had a high degree of familiarity with EPaCCS and strongly agreed that it was a normal part of their work (see Figure).

Distinct classes were identified in terms of strength of familiarity with EPaCCS, with hospice teams most likely to feel a strong familiarity with EPaCCS, and primary care and care home staff less likely. EPaCCS were perceived to support sharing of advance care plans but this often excluded social care providers.

Multiple latent subpopulations were identified across the four domains of NPT.

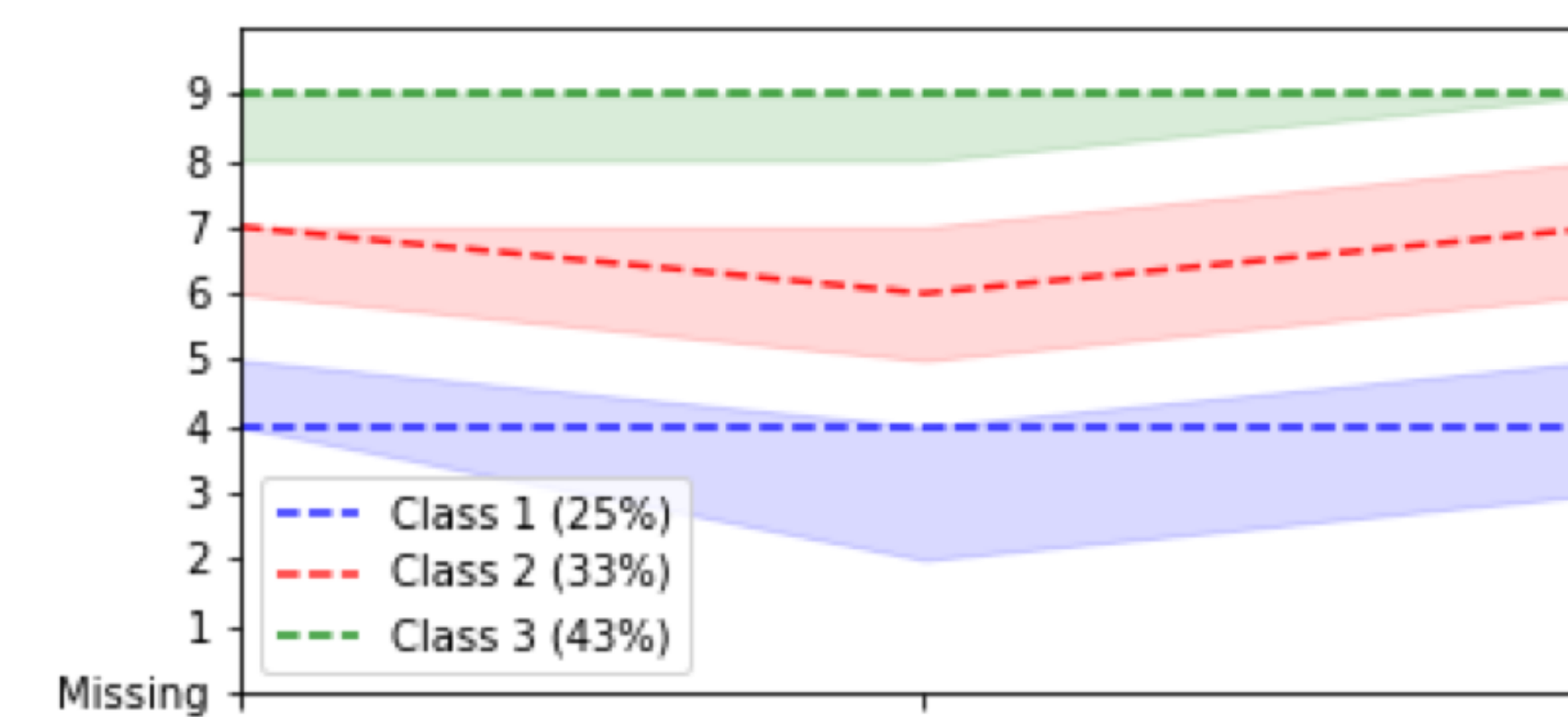
CONCLUSION

Widespread variation in familiarity and responses to NOMAD was identified across settings of care, despite the presence of mature systems in surveyed regions.

EPaCCS require optimisation to avoid disparities in access to patient care preferences that are documented, shared and accessed across a multitude of care settings. The identification and amelioration of factors restricting health professional familiarity and engagement should be prioritised.

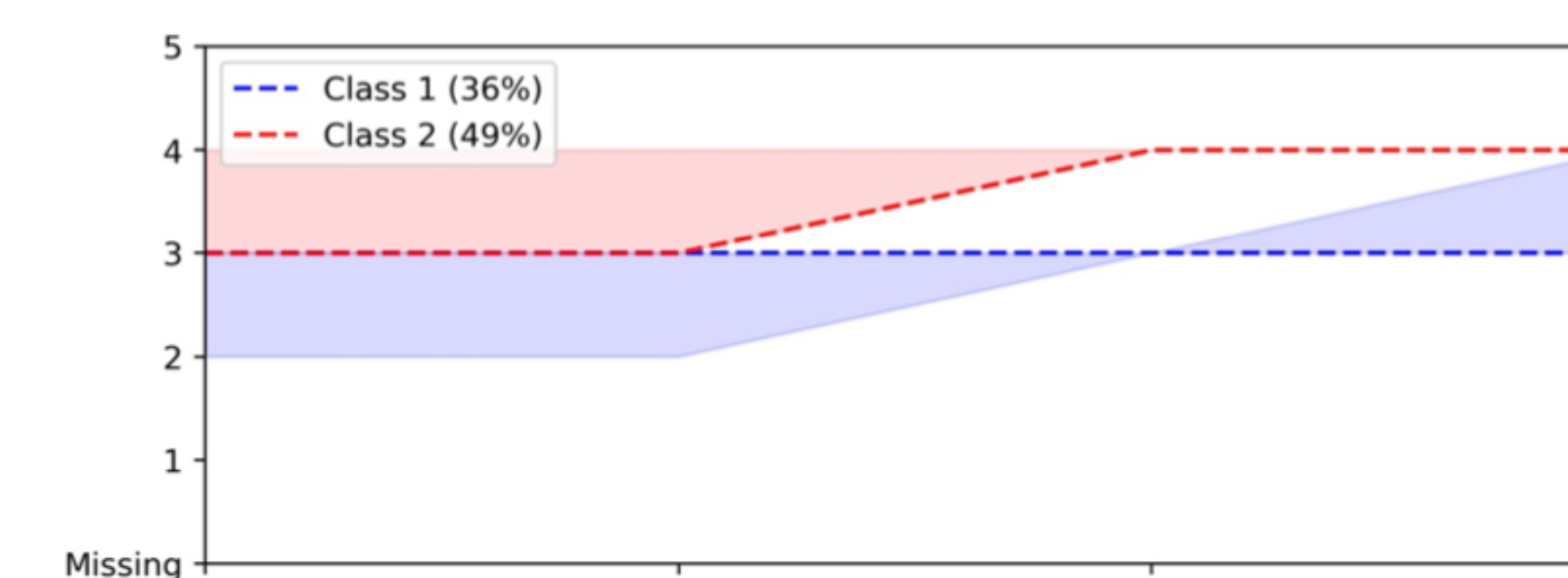
ANALYSIS

Domains explored using latent class analysis to derive subpopulations from survey responses



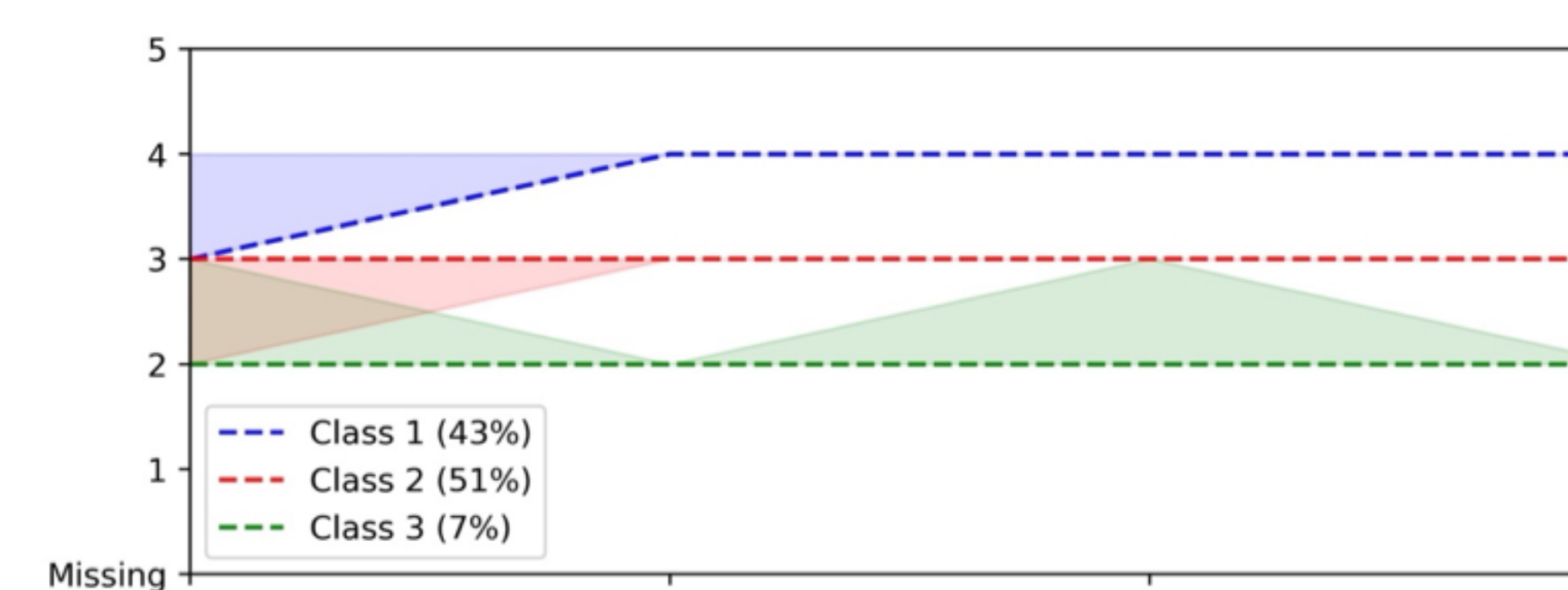
Familiarity: How familiar are respondents with EPaCCS?

Health professionals working in West Yorkshire were more likely to be in class 2 or 3 (i.e. EPaCCS are a normal part of work or a high degree of familiarity). Hospice teams were more likely to report a strong degree of familiarity with EPaCCS and consider it a normal part of their work. GPs and care home respondents were less likely to feel familiar with EPaCCS.



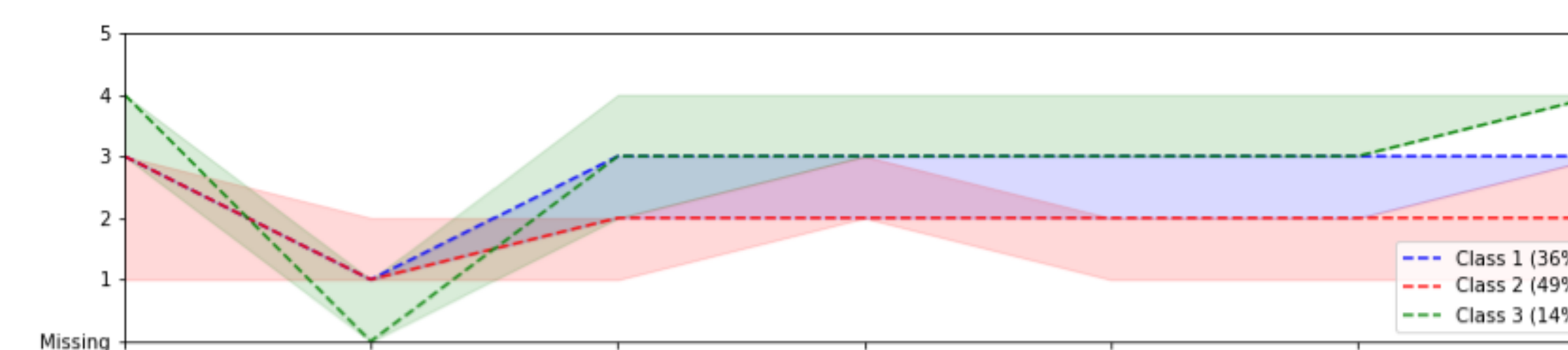
Coherence ('sense-making work'): How do people work together in everyday settings to understand and plan the activities that need to be accomplished to put an intervention and its components into practice?

Around half of all respondents were in Class 2, with high levels of agreement that EPaCCS differ from usual ways of working and that it has potential value in their work. Class 1, with lower levels of agreement to these statements, included a third of respondents. GP practice teams, hospital teams and community nursing teams were more likely to be in Class 1.



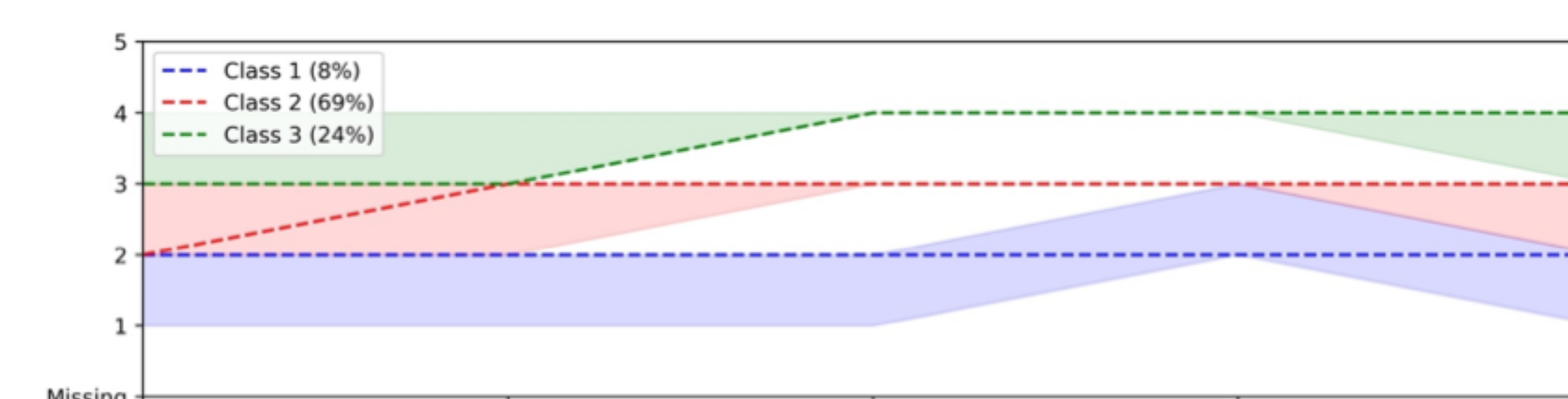
Cognitive participation ('relational work'): How do people work together to create networks of participation and communities of practice around interventions and their components?

Class 1 (42.5%) included respondents who strongly agreed with statements of participation (e.g. using EPaCCS is a legitimate part of their role and they support its continued use). Class 2 (50.6%) included respondents who mostly agreed with statements and were more likely to include respondents from care homes and GP practice team staff. Class 3 (6.8%) were largely neutral, neither agreeing nor disagreeing - also likely to include respondents from care homes and GP practice teams, but less likely to include respondents from West Yorkshire.



Collective action ('operational work'): How do people work together to enact interventions and their components?

Class 1 (36.4%) included respondents who mostly agreed with items (e.g. EPaCCS as easy to integrate into work, confidence in others to utilise EPaCCS, sufficient resources available). Class 2 (49.5%) was the largest group of participants with responses suggestive of ambivalence across items. This group was very likely to include hospital team members. Class 3 included responses that were strongly supportive of statements and were more likely to be from care homes and West Yorkshire.



Reflexive monitoring ('appraisal work'): How do people work together to appraise interventions and their components?

Three classes were detected with graduated levels of agreement to statements (e.g. being aware of the effects of EPaCCS, and valuing the effects EPaCCS have on their work). Class 1 reported moderate agreement with statements. In Class 2 (over two-thirds of respondents), stronger agreement with statements was evident. Class 3 (a quarter) reported very strong agreement with statements. For both Class 2 and 3, respondents were more likely to be based in care homes, community nursing teams, hospice teams and hospital teams.

REFERENCES

- [1] Huber MT, Highland JD, Krishnamoorthi VR, et al. Utilizing the Electronic Health Record to Improve Advance Care Planning: A Systematic Review. *American Journal of Hospice and Palliative Medicine* 2018. doi: 10.1177/1049909117715217.
- [2] Allsop MJ, Chumbley K, Birtwistle J, et al. Building on sand: digital technologies for care coordination and advance care planning. *BMJ Supportive & Palliative Care* 2021. doi: 10.1136/bmjspcare-2021-003304.