




Identifying patients with additional needs isn't enough to improve care: harnessing the benefits and avoiding the pitfalls of classification

Natalie Armstrong , Elizabeth Sutton , Sarah Chew, Carolyn Tarrant 

Department of Population Health Sciences, University of Leicester, Leicester, UK

Correspondence to

Professor Natalie Armstrong, Department of Population Health Sciences, University of Leicester, Leicester, UK; Natalie.Armstrong@le.ac.uk

Accepted 8 December 2023
Published Online First
22 December 2023

Classification—the process of sorting people or things into groups according to shared qualities or characteristics—is increasingly used within healthcare as a means of identifying patients with particular needs and/or risks. This is important because receiving care in hospital can expose some particularly vulnerable groups of patients to increased risk of harm and poor outcomes, for example, the systemic safety inequities experienced by people with learning disabilities.¹

IDENTIFYING AND RESPONDING TO PATIENTS WITH ADDITIONAL NEEDS

In order to deliver care that meets individual patients' needs, health services must, first, be able to identify those with additional needs and, second, be able to mobilise an appropriate response to these. Various ways of identifying patients with additional needs and/or risks have been developed. One obvious example is the use of wristbands for those with drug allergies, although the potential for confusion between different schemes at different hospitals has been recognised.²

The paper by McVey and colleagues in this issue of *BMJ Quality & Safety* focuses on patients who are identified as being at increased risk of falling while in hospital,³ and is a welcome contribution to this literature. Inpatient falls are the most common type of safety incident reported by acute hospitals worldwide.⁴ McVey and colleagues focus on spoken communication about patients' falls risk in hospital. Drawing on qualitative data from interviews and ethnographic observations of a range of formal and informal spoken communication (eg,

ward meetings, handovers), the authors highlight how such talk was at times: (1) categorical talk, focused on a patient's risk level; (2) multifactorial talk, focused on seeking to modify identified risks or (3) hybrid talk, that both referenced 'high risk' patients *and* actions that could be taken to modify individual risk factors. Hybrid talk went beyond merely categorising patients in terms of their level of falls risk, and extended to exchanges about multifactorial falls prevention practice, but the nature of the communication could support or constrain multifactorial falls prevention activity.

In this editorial, we reflect on the potential benefits and possible harms of classification within healthcare by drawing together McVey and colleagues' paper on falls prevention and our own recent work published in this journal on the use of visual identifiers for people with dementia in hospital.⁵ Evidence suggests that people with dementia experience greater numbers of safety incidents and a higher risk of mortality while in hospital than those without dementia.⁶ The use of visual identification schemes to identify this group of patients is widespread within the UK⁷ and there is some uptake internationally.^{8,9}

In our earlier paper, we reported a qualitative study seeking to understand the potential mechanisms of action underpinning the use of visual identifiers (eg, a butterfly or flower on patients' notes and/or at the bedside) in hospitals.⁵ Such symbols are increasingly used in an effort to signal to staff that a patient may have additional needs. We identified potential benefits of identifiers for the



► <http://dx.doi.org/10.1136/bmjqs-2023-016481>



© Author(s) (or their employer(s)) 2024. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Armstrong N, Sutton E, Chew S, et al. *BMJ Qual Saf* 2024;**33**:152–155.

implementation of dementia-specific interventions, in informing decision-making about allocation of resources, and acting as a quick reference cue for staff. However, for such potential benefits to be realised, the use of identifiers needed to be supported meaningfully through staff training, the availability of resources and efforts to develop a supportive culture for caring for this patient group.

We were struck by the similarities between our paper and that by McVey and colleagues in terms of what they highlight about the limitations and potential unintended consequences of approaches to identifying patients with additional needs in practice. We frame such identification and/or risk management tools as ‘classificatory devices’. According to Bowker and Star,¹⁰ classification involves segmenting the world in order to conduct some form of work, whether for bureaucratic purposes or in order to produce knowledge. Classification matters (as Bowker and Star note) because it ties the person being labelled ‘into a set of work practices, beliefs, narratives and organisation structures’.

THE LIMITATIONS AND POTENTIAL UNINTENDED CONSEQUENCES OF CLASSIFICATION

While classification can signal the need for additional support, classification alone does not ensure that patients are safer and/or receive higher quality or more person-centred care. Ensuring appropriate care requires more than the mere act of classifying patients into groups; this does not in and of itself do anything meaningful to improve care or reduce risk. Acting meaningfully to address the issues raised by an act of classification (such as identifying a patient as at high risk of falling or the application of a dementia symbol) is likely to require time and expertise. McVey and colleagues conclude that a person-centred approach is key to meaningful engagement with individual patients’ needs and risks, but recognise that this takes time and capacity to achieve and that both may be in short supply on busy hospital wards. Similarly, we highlighted concerns that staff may not have the required time and specialist skills to meaningfully support a patient with dementia even if they had been identified to them through the use of a visual identifier.

When assessing the use of such classificatory interventions in practice, it is important to consider and evaluate how, why and under what circumstances such well-intended actions might lead to negative unintended consequences, either on the outcomes of interest (‘paradoxical effects’) or other outcomes (‘harmful externalities’).¹¹ Classification can be misleading and/or lead to inappropriate assumptions about and responses to individual patients’ needs and capabilities. Classifying someone as a ‘falls risk’ or ‘person with dementia’ could result in assumptions about individual patients’ abilities, for example, that all high risk falls patients need supervising or that all

patients with dementia will be unable to feed themselves. Such assumptions could lead to an approach to care that impacts negatively on a person’s independence and functional ability.¹²

There is also a danger that homogenising patients into a single classificatory group (‘falls risks’ or ‘persons with dementia’) can lead to de-personalisation and the very opposite of person-centred care, threatening personhood and reducing individual agency.¹³ This may be especially likely when patients’ family members and carers, who often know most about the patient’s history and context, are prevented from supporting them in hospital (such as during the COVID-19 pandemic).^{14 15} Classification can serve to limit the exploration and discussion of alternative means through which risk can be managed and/or person-centred care delivered. The use of supervision was a key intervention for patients identified as at high risk of falling within McVey and colleagues’ study, but while this may address some of the consequences of mobility problems (eg, acting to steady a patient when walking) it does not address the underlying causes, which may be modifiable.

HARNESSING THE POTENTIAL POSITIVES OF CLASSIFICATION, WHILE MINIMISING UNWANTED CONSEQUENCES

We do not suggest there is no scope for positive benefit as a result of using classificatory devices to identify patients who have particular needs. Such classification has potential value in coordinating healthcare work to effectively identify and support patients with additional needs and/or risks. McVey and colleagues illustrate how classification around falls risk enabled decision-making about allocating nursing supervision. Our work demonstrated the potential value of visual identifiers in directing resources to patients with additional needs as a result of dementia, and acting as a quick reference cue that a patient may have communication difficulties.

Many of the limitations and potential unintended consequences we highlight arguably have their roots in the fact that responding appropriately and sensitively to a patient who has been classified as having additional needs or being at risk is more complex than, for example, identifying someone who is allergic to a particular drug and ensuring they do not receive it. In the latter case, the identifier (eg, a coloured wrist band) is standing in for knowledge of a specific risk and the required action as a result is clear (do not administer the drug). In contrast, while the forms of classification differ in the two papers we have discussed, both position patients as potentially at risk but leave the level and scope of that risk, along with the appropriate response, open to interpretation by healthcare staff. Such classifications ‘short-cut and package common sense knowledge about category members and their actions’,¹⁶ and healthcare staff may

lack time, appropriate training or resources, and/or detailed knowledge about the patient in front of them. It is perhaps not surprising, therefore, that assessments of risk and approach to care may sometimes be based on normative understandings of ‘people with dementia’ or ‘people at risk of falls’, and not the actual needs and capacities of the individual patient.

Actions to mitigate such potential limitations and unintended consequences are relatively easy to identify but may be harder to achieve in practice. They are likely to include: staff training in the specialist skills needed to support patients; availability of staff with such specialist skills when and where patients need them; time and the necessary resources to meet patients’ needs; and more effective involvement of family and carers. In addition, McVey and colleagues draw attention to the key role that leaders within organisations can have in encouraging a more personalised approach, for example, by actively questioning why particular interventions are or are not in place for individual patients.

In conclusion, while the use of classification to identify patients who have additional needs and/or are at increased risk of harm has potential benefits, care needs to be taken to avoid possible harm and unintended consequences. We have highlighted above several actions that would help ensure the benefits of classification are maximised, but none of these are necessarily easy to achieve in practice, especially in the context of overwhelmed and under-resourced health services. However, ensuring that patients with additional needs and/or risks have these appropriately identified and responded to while receiving healthcare must be a priority. The need for healthcare to be equitable, that is, not vary in quality because of a patient’s personal characteristics, is recognised as an important quality dimension,¹⁷ and this issue has received increased attention in recent years.^{18–20} If used well, classification can be part of the move to ensuring more equitable care for those with additional needs.

Twitter Natalie Armstrong @drnatarmsstrong, Elizabeth Sutton @LizSule and Carolyn Tarrant @carolynctarrant

Acknowledgements NA & CT are supported by the National Institute for Health and Care Research (NIHR) Greater Manchester Patient Safety Research Collaboration (GM PSRC). NA is supported by the NIHR Applied Research Collaboration East Midlands (ARC EM). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Contributors All authors contributed to conception of the paper, critically read and modified subsequent drafts and approved the final version.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.

ORCID iDs

Natalie Armstrong <http://orcid.org/0000-0003-4046-0119>

Elizabeth Sutton <http://orcid.org/0000-0002-6691-6287>

Carolyn Tarrant <http://orcid.org/0000-0001-7356-5342>

REFERENCES

- Ramsey L, Albutt A, Perfetto K, *et al.* Systemic safety inequities for people with learning disabilities: a qualitative integrative analysis of the experiences of English health and social care for people with learning disabilities, their families and Carers. *Int J Equity Health* 2022;21:13.
- Mayor S. Hospitals must Standardise patients’ Wristbands to reduce risk of wrong care. *BMJ* 2007;335:118.
- McVey L, Alvarado N, Healey F, *et al.* Talking about falls: a qualitative exploration of spoken communication of patients’ fall risks in hospitals and implications for Multifactorial approaches to fall prevention. *BMJ Qual Saf* 2024;33:162–72.
- Agency for Healthcare Research and Quality. Falls. PSNet. 2019. Available: <https://psnet.ahrq.gov/primer/falls> [Accessed 10 Oct 2023].
- Sutton E, Armstrong N, Locock L, *et al.* Visual Identifiers for people with dementia in hospitals: a qualitative study to unravel mechanisms of action for improving quality of care. *BMJ Qual Saf* 2023;32:600–7.
- Fogg C, Griffiths P, Meredith P, *et al.* Hospital outcomes of older people with cognitive impairment: an integrative review. *Int J Geriatr Psychiatry* 2018;33:1177–97.
- Kuberska K, Dixon-Woods M, Martin G, *et al.* Visual Identifier systems for patients with cognitive impairment in Healthcare settings: a survey of practice in UK hospitals. *Int J Older People Nurs* 2022;17:e12472.
- Feil M. Family members advocate for improved identification of patients with dementia in the acute care setting. *Pennsylvania Patient Safety Advisory* 2016;13:1–10.
- Murray ME, Wong Shee A, West E, *et al.* Impact of the dementia care in hospitals program on acute hospital staff satisfaction. *BMC Health Serv Res* 2019;19:680.
- Bowker GC, Star SL. *Sorting things out*. Cambridge, Massachusetts: MIT Press, 2000.
- Catlow J, Bhardwaj-Gosling R, Sharp L, *et al.* Using a dark logic model to explore adverse effects in audit and feedback: a qualitative study of gaming in colonoscopy. *BMJ Qual Saf* 2022;31:704–15.
- Featherstone K, Boddington P, Northcott A. Using signs and symbols to label hospital patients with a dementia diagnosis: help or hindrance to care *Narrat Inq Bioeth* 2020;10:49–61.
- Clissett P, Porock D, Harwood RH, *et al.* The challenges of achieving person-centred care in acute hospitals: a qualitative study of people with dementia and their families. *Int J Nurs Stud* 2013;50:1495–503.
- Collier A, Balmer D, Gilder E, *et al.* Patient safety and hospital visiting at the end of life during COVID-19 restrictions in Aotearoa New Zealand: a qualitative study. *BMJ Qual Saf* 2023;32:704–11.
- Campbell L, Morley G. The ethical complexity of restricting visitors during the COVID-19 pandemic. *BMJ Qual Saf* 2023;32:689–92.
- Stokoe E. Forward with membership category analysis: methods for systematic analysis. *Discourse Studies* 2012;14:277–303.

- 17 Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington DC: National Academy of Sciences, 2001.
- 18 Nundy S, Cooper LA, Mate KS. The Quintuple aim for health care improvement: a new imperative to advance health equity. *JAMA* 2022;327:521–2.
- 19 Franklin BD, Thomas EJ, Soong C. Advancing equity, diversity and inclusion at BMJ quality and safety *BMJ Qual Saf* 2023;32:301–4.
- 20 Chin MH. Advancing health equity in patient safety: a reckoning, challenge and opportunity. *BMJ Qual Saf* 2021;30:356–61.