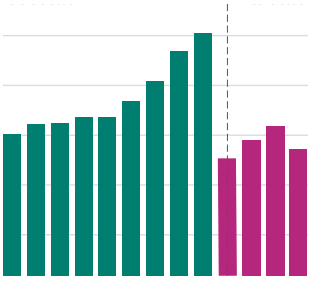
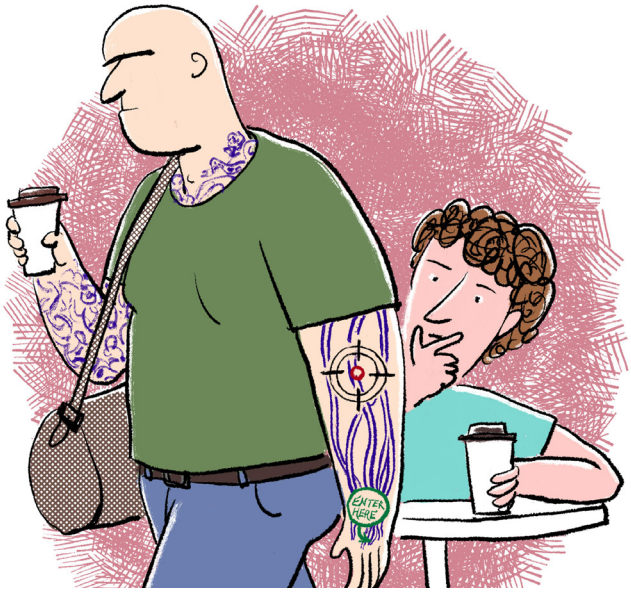
lost in words





OPINION Matt Morgan

A dictionary for medicine's unnamed moments

A selection of words that capture what medicine feels like when no ICD code will do

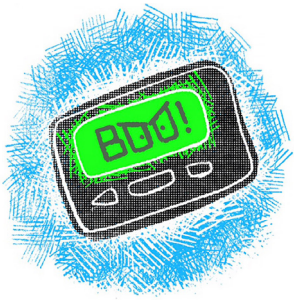
Words matter. In medicine, they act as scalpel and suture. They are the only operating instruments we carry into every conversation. They diagnose, they console, they bind people together in the aftermath. And they also shape how we see ourselves.

In September, I wrote a column in *The BMJ* (https://www.bmj.com/content/390/bmj.r1806) about how I was starting my own medical lexicon (https://thedictionaryofbloodandsilence.com/). Here, I invite you to read this selection of 25 of these neologisms crafted for the unspoken experiences of doctors and healthcare workers. Some are thoughtful. Some are quietly humorous. All are honest.

Since I began creating and sharing these words, I've been contacted by other doctors who've coined their own. Among the

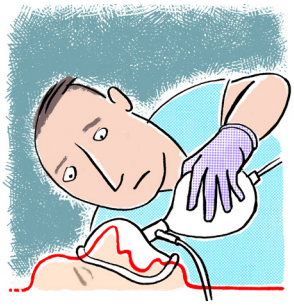
Beeperphantom

Hearing your pager go off when it has not.



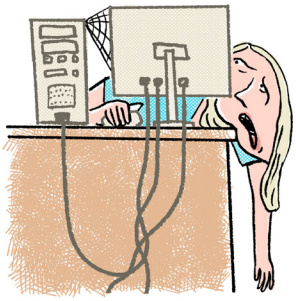
Breathchase

The desperate rhythm of trying to coax air back into someone slipping away.



Cursorcrawl

The glacial pace of an ancient hospital computer waking up, during which you can measure time in heartbeats and watch your clinical urgency slowly evaporate.



Devastdiscernment

The sudden realisation that the illness you are contemplating in a detached, professional way is actually happening to you.

Submitted by Barry Pettit.

Exitcall

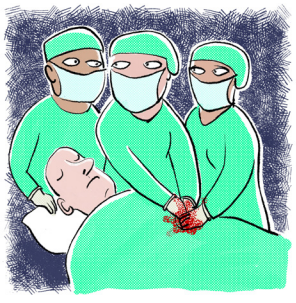
The pager going off just as you're about to leave for the day.

Farsilence

The distant quiet you hear on a ward at 3 am, knowing it can shatter at any second.

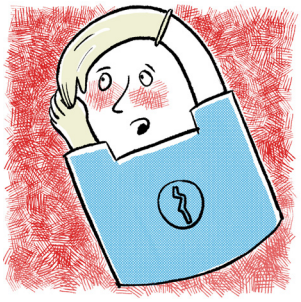
Glancecode

The silent exchange of looks between staff when things turn serious.



Glovelock

That flash of panic when you can't get a glove off quickly.



many submissions to my strange dictionary of medical feelings was one that arrived from a place I didn't know about at the time: a care home in Cornwall, where Barry Pettit was receiving palliative care. A general practitioner for three decades, he had spent a lifetime helping others make sense of illness, yet in his final weeks he reached once more for the language of medicine—coining the fourth word in this list, "devastdiscernment". His daughter later wrote to tell me he had died before he could read my reply. Knowing now the circumstances in which he submitted his word lends it a profound and humbling force. It is a reminder that behind every clinical definition sits a human story, and sometimes the person who teaches us the most about the experience of illness is a colleague who has just crossed its threshold themselves. I hope his addition is a fitting tribute to him.

Words diagnose, console, and bind people together

Nameghost

The sudden intimacy of caring for a patient who shares a loved one's name.

Gownsnap

The satisfying rip and shrug of removing a surgical gown.

Passnesia

The sudden mental blackout when trying to log in to a hospital computer you've used daily for years, as if the password has been surgically removed from your memory.

Hospibrew

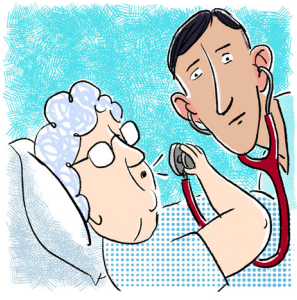
The distinctive hospital smell of equal parts reheated food and human waste.

PlotTwistitis

The sudden rewrite of a patient's story when a new diagnosis appears.

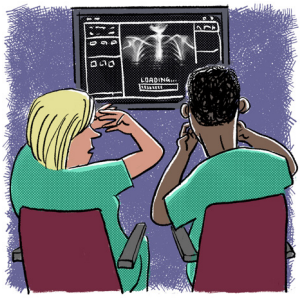
Lifespill

The moment you realise a patient has just told you something they have never told anyone else.



Radiloom

The suspended moment between ignorance and revelation while an x ray loads.

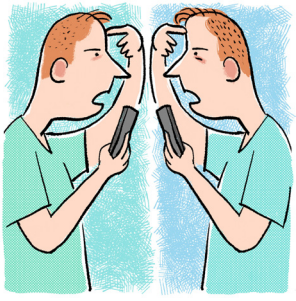


Mentorclench

The mix of pride and anxiety while watching a junior attempt a first procedure.

Rosterosis

The creeping malaise that sets in when the new rota drops into your inbox and you immediately start bargaining with your future self.



ILLUSTRATIONS BY MALCOLM WILLETT

I wanted to start this dictionary to make a record of previously unnamed moments: the first breath after resuscitation, the gloves snapping on at 3 am, the way light falls across an empty bed.

"The limits of my language are the limits of my world," said Ludwig Wittgenstein. Medicine proves this daily. We can name hundreds of anaesthetic agents, surgical manoeuvres, pathological signs, but we don't yet have a name for the moment you care for a patient who shares your mother's name (*Matronymosis*). Without language for an experience, it remains an unprocessed weight—something carried but never unpacked. These moments become private ghosts that may continue to haunt us. But when spoken or written, they lose their power to hurt or scare us.

Naming these moments is not indulgence. It's clinical housekeeping for the soul. When our language shrinks, the human side of medicine begins to suffocate. We risk lexical ischaemia, a narrowing of meaning caused by semantic rust. The result will be a corrosion of care born from what we cannot name. There is something quietly liberating in discovering a word for an experience you've felt all your life but never spoken. It whispers: you are not alone.

This is not a dictionary of pathology. It is a shared language for those who have walked the coded corridors of hospitals, and carried home the scent, the silence, and the strange music of a shift. If medicine is about care, then naming the unnameable is part of that care—for patients, for colleagues, and for the quiet places inside ourselves that deserve recognition.

These words have been made to tell you: you're not the only one who's felt this. We are all a little lost—and naming it is how we begin to find our way.

Matt Morgan, consultant in intensive care medicine, Cardiff

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Scrubswim

The restless slipping and sagging of scrubs that do not fit.

Storyhold

Keeping a patient's life story in your head so you can tell it for them when they no longer can.

Shiftdrift

The feeling of hours blending together until you're not sure which day you're in.

Veinspotting

The idle pastime of scanning strangers arms for possible cannulation sites.

Stickscape

The miniature hell of adhesive that refuses to peel the way you want.

Wardfloat

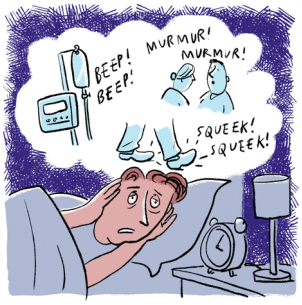
That dissociated drift through a shift when you're running on fumes.

Stilltone

The thick, absolute quiet in the room when you certify a death.

Wardhum

The low, constant background noise of monitors, murmurs, and footsteps - inaudible to you until the moment you step outside and realise it's been singing to you all along.



ILLUSTRATIONS BY MALCOLM WILLETT

OPINION Paolo Polzella

Spending a penny, pushing up daisies, and other clinical mysteries

Idioms used in medical practice might be baffling at first to the non-native English-speaking doctor, but they carry a "gentle wit" that lies at the heart of human interaction, writes **Paolo Polzella**

When I first arrived in the UK as a resident doctor, I thought my English was excellent. I had studied hard, passed my exams, and understood everything my colleagues said during ward rounds—or so it seemed.

One morning, a kind older gentleman told me that he had been "spending a penny" more often than usual. I nodded politely and made a note, assuming he had been talking about his finances. However, I quickly realised that he must have meant something else. It was only later that a nurse kindly explained that he was referring to passing urine. I had understood every word, but the meaning had flown straight over my head.

This is the curious burden of the foreign doctor: not the Latin of medicine, but the poetry of everyday life. Idioms, colloquialisms, and euphemisms form the hidden curriculum of clinical practice. Unlike technical terms, idioms do not announce themselves as difficult. You hear "under the weather," "fit as a fiddle," or "kick the bucket" and think you have understood, until you realise you have not. Sometimes, the imagery is simply baffling: being caught between a "rock and a hard place" (forced to choose between two equally bad options); being told to "grasp the nettle" (deal bravely with an unpleasant problem); learning that a patient has "had a good innings" (does cricket now appear on death certificates?); or hearing "I'm hanging on by the skin of my teeth" (how so, and why teeth?). In the heat of a busy ward, acronyms ("Is she for a TTO?") collide with idioms ("by hook or by crook"), leaving doctors who have not yet mastered idioms perpetually one step behind.

ILLUSTRATIONS BY DOM MCKENZIE

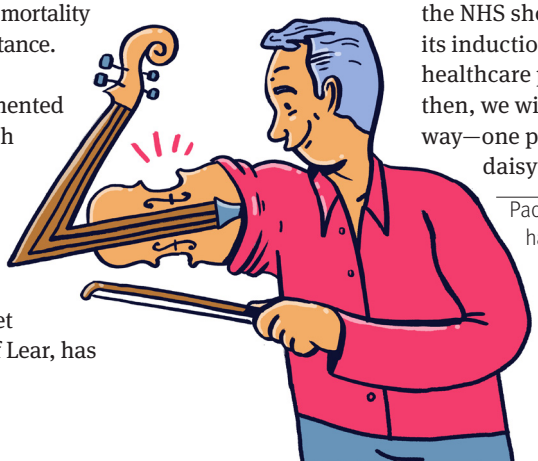
But why do patients use idioms in the first place? One reason is that euphemisms ("spending a penny" or "shuffling off this mortal coil") are more polite ways of talking about urine, bowels, or death. Humour and modesty are another: idioms carry a gentle wit that makes sensitive topics less awkward, especially among older people. Saying that someone has "popped their clogs" is less dramatic than saying they have died. Shared culture also plays a role. Idioms assume a mutual understanding and can create instant rapport, helping to lower emotional tension and establish a connection with a patient. The metaphors used to describe death are particularly revealing: to "fall off the perch" or "push up daisies" reflect a society that cloaks mortality in humour and distance.

This is the curious burden of the foreign doctor: not the Latin of medicine, but the poetry of everyday life

In *On Being Ill*, Virginia Woolf lamented how poorly English serves us when describing bodily suffering: "English, which can express the thoughts of Hamlet and the tragedy of Lear, has no words for the shiver and the headache." Patients, faced with this inadequacy, use metaphors, filling the gaps with creativity. The result is poetic and comforting, but for doctors who have not yet mastered idioms, it adds another layer of interpretation between symptoms and meaning.

After 15 years, I have amassed a small personal dictionary of idioms overheard in consultations and ward corridors. Some are innocuous ("making a mountain out of a molehill"), some are perplexing ("shooting from the hip"), and some are distinctly anatomical ("pulling his hair out"). Some have got me into trouble. Once, wanting to reassure a patient that he would soon be leaving hospital, I told him he was "on the way out," only to realise I had inadvertently told him he was dying.

Learning these phrases is more than a linguistic exercise; it lies at the heart of human interaction. It helps you to establish empathy, ease tension, and foster a sense of belonging to the surrounding culture—and, in turn, this makes you a better doctor. This challenge is not confined to doctors who are new to English; it is also generational. Idioms change over time. What was once commonplace, such as "swinging the lead," might puzzle younger native English speakers today. Perhaps, then, the NHS should include idioms in its induction programme for all healthcare professionals. Until then, we will have to learn the hard way—one penny, one rock, one daisy at a time.



Paolo Polzella, consultant haematologist, Oxford University Hospital Foundation Trust, Oxford, UK

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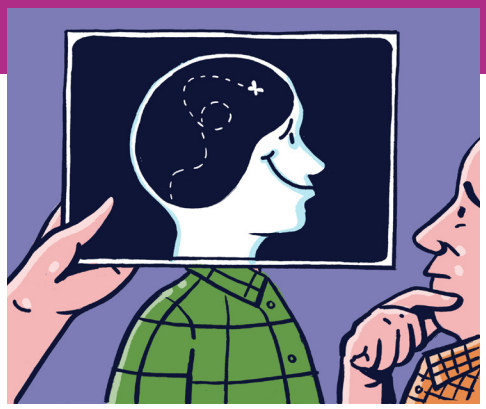

OPINION Nikki Nabavi

Migration of the clinical lexicon to colloquial slang

Spotting medical workplace jargon in the wilds of everyday life

Doctors are known for our use of jargon, acronyms, and myriad medical phrases that can sometimes feel like a secret code, or even a whole other language, to our patients. Even those who spend the most time with us may hear us using words or expressions that require translation into non-technical language.

It has been estimated that medical students learn 9000 new words in their first year, and about 55 000 over the course of their medical degree. Some have suggested that medical students learn more new words during their time at university than language students.

After commencing our careers, many of us notice how easily medical terms slip into everyday talk ("I'll vet that idea"). This exchange is not carelessness, but creativity. Language, like medicine, evolves for efficiency and connection. When a borrowed phrase captures intended meaning more precisely, it will make its way into your personal lexicon.

This phenomenon is not unique to medical jargon. We already borrow words from foreign languages and incorporate them when they are better descriptors than the English alternative. Similarly, some corporate jargon—such as "low hanging fruit" and "bandwidth"—has sneaked into everyday use and is now widely recognised.

Whether it's generational or cultural slang, incorporation of other languages, or workplace terminology, there is endless renewal of language. Words migrate where they are needed.

Below are some alternative uses of terms from the common clinical lexicon, a shared phrasebook my peers and I have often caught ourselves using outside the hospital walls.

Time

Doctors are primed to think in chronological terms. Medical timekeeping has quietly infiltrated our day-to-day language, bringing with it a surprising level of temporal structure.

Acute, chronic. For example, "I've become acutely aware that..." or, "He's chronically late"

BD, TDS, QDS. Twice, three times, and four times a day, respectively. For example, "Coffees BD on a normal working day, coffees TDS for a long day on call"

Day X post-Y. Used as a measurement of time after an event. For example, "Day 1 post-curl," in reference to curled hair dropping over time, or, "Day 2 post-flight," in reference to jet lag

Mane. From the Latin, used in medical notes meaning tomorrow morning. Often found in text messages from doctors. For example, "Can I catch a lift with you mane?"

SDT day. Self-development time. Used to describe a productive day off work, including when mundane household chores or life admin are achieved

Zero day. Any day off where little was achieved or a non-productive day at home.

Place

Once we understand the importance of standardised descriptive terminology, doctors often apply the same precision to navigating everyday spaces.

Medial, lateral. Used to describe geographical location, such as when trying to find a lost friend at a festival: "We're near the midline, lateral to the flag when facing the stage"

Palpate. To feel for, with the aim to locate. For example, to palpate your pocket to check for your phone.

It has been estimated medical students learn 9000 words in their first year, and about 55 000 over their degree

Shorthand

Doctors are famous for their poor handwriting, so perhaps some of the written shorthand inspired by medical documentation has gone unnoticed by the layperson when they migrate into our texts, emails, birthday cards, and shopping lists.

Impression. Used to summarise findings or a likely conclusion. For example, "Impression: she's upset with me"

NAD. No abnormality detected or nil acute concerns. Used to confirm things are okay

PRN. For use as required. For example, "I'm tired today, so I've been napping PRN"

Query. Found in written form as a question mark preceding a word. Examples include "?Coffee" (query coffee) or "?lunch" (query lunch), suggesting you are ready for coffee or lunch if the other party is. Query before the word is suggestive—yes, unless proved otherwise. This differs from asking a question, as it is suggesting a likely outcome: a query suggests something but requests clarification or any immediate objections

?Cause.See query (above). Used when uncertain of causality. For example, "She's in a bad mood today ?cause"

+++ Meaning something is present in excess, used to describe much or many. For example, "It's meant to be sunny+++ this weekend," or adding "milk+++" to a shopping list

+/- Used to indicate that the term directly after the symbols may or may not happen. For example, "Shall we go for dinner +/- drinks?"

+/- proceed. Used when indicating that something may go further, depending on the evolving situation and any findings. For example, when planning to make dinner, "See if there's any pasta in the cupboard+/- proceed."

Social navigation

Doctors have a habit of applying clinical logic to personal routines and social interactions. Here are some examples of ways you can elevate your personal lexicon with quick and efficient terms to acknowledge relational dynamics.

At baseline. When something (or someone) is in the normal or expected state

Ceiling of care. Used to describe maximum capacity, or no further ability to take on any more

Clinically dry. Thirsty

Completely benign. A harmless situation or individual, or when there are no further problems

Dominant, recessive. The former used when a trait or person is the common denominator and means something always happens whenever it is present; the latter describes when another factor is required to activate the outcome. For example, the need to order dessert at a restaurant is dominant for some, recessive for others

I'm on free fluids tonight. Going out for a drink

On a background of X. Giving context for a scenario. For example, "I'm exhausted today, on a background of being on call over the weekend"

Peer reviewed. When someone repeats your joke, but makes it funnier

Secondary. When event X is secondary to event Y, often as a way to capture causality. For example, "I won't be able to make it, secondary to the train being cancelled"

Self-isolate. Describing staying at home or being alone as a preventative measure. For example, "I've spent too much money this month, so I'm having to self-isolate."

Honorary mentions

Finally, a space for the words and phrases which may not have a new meaning or unique clinical context but may be seeing an increased frequency in their casual use by doctors.

Affect. Defined as the collection of behaviours that describe someone's emotional state. For example, "Did you notice the shop assistant's affect today?"

Rapport. Creating a good relationship with mutual understanding, trust, and respect. For example, "I had good rapport with the plumber today"

Vetting. To vet something or get something vetted implies seeking approval to proceed. For example, "They're happy for us to bring the dog to their house, I vetted it with them last night"

Wean. Gradual reduction in an attempt to stop.

Classification

If we can clinically evaluate a patient at 3 am, we can certainly score our own functionality. Hence the rise of casual self-assessment, a useful shorthand for communicating wellbeing (albeit mildly concerning if not used ironically)

Use of a scoring system. Examples such as the Glasgow Coma Scale (GCS), National Early Warning Score (NEWS), or Clinical Frailty Score (CFS) can capture how you're feeling. For example, "I'm a CFS 4 today" (CFS 4 = vulnerable) or "I was GCS 14." When doctors are unwell, they may refer to themselves as "scoring" or "NEWSing," implying their basic observations may be altered and may flag up using NEWS

Welfare check. Used when checking on a friend who has not replied for a while, or perhaps someone who is behaving outside their usual character.

Process

After years of triaging, escalating, and delegating, it becomes second nature to apply the same structured thinking elsewhere. Many of these clinical frameworks prove transferable to everyday logistics.

I need to make a referral. I need your advice

Jobs list. The classic NHS jobs list system with coloured-in boxes, used instead of a to-do list or checklist

Live-in carer. A term of endearment to describe your flatmate or a friend who is staying over

Meals on wheels. Used to describe ordering a takeaway

Package of care. Alternative description for a gift or help received

Prophylactic. Used with preventative intention. For example, "I had a prophylactic early night," or "I need a prophylactic nutritious breakfast" before a big day

Spigot. As in spigotting a nasogastric tube to temporarily stop the flow of fluid. Used in place of "pause" or "hold." For example, "Spigot that idea for a moment"

Take it to the MDT. Using the abbreviation for multidisciplinary team (MDT) to refer to a wider group, often a friend group with varying life experiences. For example, a scenario or question is taken to the group to dissect and offer advice about

Triage. The process of sorting, prioritising, and allocation of tasks. For example, triaging your laundry to ensure the most immediately required items can be clean again in time for use.

ILLUSTRATIONS BY DOM MCKENZIE

You may have recognised phrases in this collection that you catch yourself using, perhaps without realising their origin. This subtle migration of language seems more common among newer generations of doctors, who may be adopting these expressions as an informal dialect. When collating this list, most doctors I asked initially said they didn't use medical terminology outside of work, confident in their neatly drawn separation of personal and professional lives. Yet, almost without fail, messages soon followed, "Actually, I just said…" and more examples arrived.

Perhaps there are phrases that are more common in certain specialties or are only adopted after further years of clinical experience. Should you have any examples to add to our collection, we welcome their submission as Rapid Responses, or by joining the conversation on social media.

Nikki Nabavi, academic foundation doctor, Royal Surrey Foundation Trust

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ORIGINAL RESEARCH Retrospective analysis of suspiciously timeless citations

How recent is recent?

Alejandro Díez-Vidal,[1 2] Jose R Arribas[1 2 3 4]

Objective To quantify the time lag between biomedical articles and the studies they describe as "recent," a term widely used to imply timeliness despite rarely reflecting the actual age of the cited evidence.

Design Retrospective analysis of suspiciously timeless citations based on a structured PubMed search of 20 predefined "recent" expressions.

Sample 1000 English language, full text biomedical articles in which a "recent" expression is directly linked to a citation.

Main outcome measure Time lag in years between citing articles and their referenced "recent" studies.

Results The age of the cited "recent" studies varied widely. The citation lag ranged from 0 to 37 years (mean 5.53 years, median 4 years, interquartile range 2-7). The most frequent lag was one year (n=159, 15.9%), and 177 references (17.7%) were at least 10 years old. Citation patterns varied across medical specialties: critical care, infectious diseases, genetics, immunology, and radiology showed shorter median lags (around two years), while nephrology, veterinary medicine, and dentistry displayed substantially longer lags (ranging from 8.5 to 14 years). Among expressions, "recent approach," "recent discovery," and "recent study" were linked to older references, whereas "recent publication" and "recent article" had much fresher citations. The citation lag was similar across world regions and gradually decreased over time, with the most recent publications showing the shortest lags. Journals with high impact factors (≥12) cited more up-to-date work.

Conclusions This playful analysis suggests that "recent" is applied with striking elasticity across biomedical literature. While some authors cite genuinely recent work, others stretch the definition to decades. Readers and reviewers should take "recent" claims with a grain of chronological salt.

In the land of biomedical publishing the R word is less a measure of time than a narrative device

Introduction

According to the *Oxford English Dictionary*, the word recent is defined as "having happened or started only a short time ago." A simple, innocent sounding definition. And yet, in the world of scientific publishing, it may be one of the most elastic terms ever used. What exactly qualifies as "a short time ago"? A few months? A couple of years? The advent of the antibiotic era?

Methods

On 5 June 2025, we—that is, the junior author, while the senior author remained in supervisory orbit—performed a structured search in PubMed using the following terms: "recent advance*" or "recent analysis" or "recent article*" or "recent data" or "recent development" or "recent evidence" or "recent finding*" or "recent insights" or "recent investigation*" or "recent literature" or "recent paper*" or "recent progress" or "recent report*" or "recent research" or "recent result*" or "recent review*" or "recent study" or "recent studies" or "recent trial*" or "recent work*."

We—again, the junior author, while the senior author offered moral support and the occasional pat on the back—reviewed the full text of each article to identify expressions involving the word "recent," ensuring they were directly linked to a bibliographic reference. Articles were excluded if the full text was not accessible through institutional subscriptions, professional networking, or morally ambiguous tactics.

Patient and public involvement

Patients and the public were not involved in the design, conduct, reporting, or dissemination of this research.

Results

The final analysis comprised 1000 articles. The time lag between the citing article and the referenced "recent" publication ranged from 0 to 37 years, with a mean of 5.53 years (standard deviation 5.29) and a median of 4 years (interquartile range 2-7). The most frequent citation lag was one year, which was observed for 159 publications. A total of 177 articles had a citation lag of 10 years or longer, 26 articles had a lag of 20 years or longer, and four articles cited references that were at least 30 years old. The maximum lag observed was 37 years, found in one particularly ambitious case.

When stratified by medical specialty, the citation lag displayed variability. Most disciplines clustered around a median of four years, but several fields clearly deviated from this pattern. Critical care, infectious diseases, genetics, immunology, and radiology showed the shortest citation lags, all with median values of up to two years. By contrast, nephrology, veterinary medicine, and dentistry showed much longer median lags, ranging from 8.5 to 14 years.

Analysis by type of expression revealed that the most frequently used terms were recent study (n=280, 28.0%), recent

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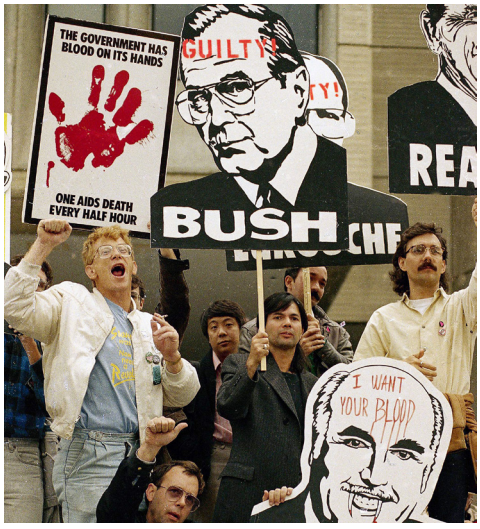
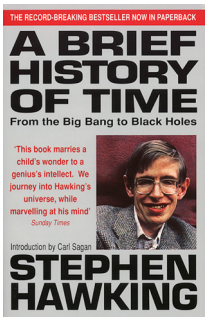


The longest citation lag was 37 years. Do 1988's Die Hard, the first AIDS day, and Discovery launch (above), A Brief History of Time (below), and the debut of Prozac (below left) feel recent to readers?

report (n=83, 8.3%), recent review (n=61, 6.1%), and recent evidence (n=58, 5.8%). Although most expressions showed citation lags comparable to the overall sample, several diverged markedly. Recent publication, recent article, recent trial, recent guidelines, recent paper, and recent result showed the shortest lags, all with medians of two years or less. By contrast, recent study, recent research, recent literature, recent investigation, and recent discovery were linked to much older references, with median lags between five and seven years.

For geographical origin, we used the World Bank classification. Across all regions, the median citation lag remained stable at four years with similar interquartile ranges. When citation lag was examined by journal impact factor, values were generally consistent across categories, except for journals with an impact factor of 12 or higher, which showed a shorter median lag of three years and narrower interquartile ranges.

When examined by publication year, the citation lag showed a gradual decrease over time. Articles published before 2000 tended to cite considerably older references, with median lags of six to eight years. This lag progressively shortened in more recent decades, reaching a median of 2.5 years for articles published between 2020 and 2025.



Discussion

Principal findings

Our investigation confirms what many readers have long suspected, but none have dared to quantify: in the land of biomedical publishing, "recent" is less a measure of time than a narrative device. To be fair, some references were genuinely fresh—barely out of the editorial oven. But then there were the mavericks: 177 articles cited works 10 years or older, 26 drew on sources more than 20 years old, and in a moment of true historical boldness, four articles described "recent" studies that predated the launch of the first iPhone.

Medical specialties also offered intriguing temporal recency standards. Critical care, infectious diseases, genetics, immunology, and radiology appeared admirably committed to contemporaneity. Perhaps the constant churn of new pathogens, genomes, and antibodies keeps them from looking backwards. Nephrology, veterinary medicine, and dentistry, however, embraced a more reflective pace. We might excuse nephrologists and veterinarians for their retrospective tendencies, but dentistry's love for decade old references raises the possibility that some citations, like wisdom teeth, take a decade to fully emerge.

The lexicon of "recent" expressions also revealed fascinating differences. Recent publication and recent article showed reassuringly tight timelines, suggesting that for these terms, recent still means what the dictionary intended. At the other end of the spectrum, recent study, the most commonly used expression, behaved more like recent-ish study. Recent discovery and recent approach performed even worse, reinforcing the suspicion that some authors consider "recent" a purely ornamental term. Readers may be advised to handle these terms with protective gloves.

Interestingly, the desire to stretch "recent" across time seems to transcend cultural, economic, and linguistic boundaries. Citation lags were broadly similar across world regions, suggesting that the definition of "recent" is universally elastic, perhaps even an intangible asset of academic culture itself.

Finally, journals with 2024 impact factors in the stratosphere (≥12) showed a striking tendency to accumulate "recent" expressions accompanied by minimal citation lags. In these high impact environments, references seem to be treated less like fine wine, meant to mature over time, and more like sushi, best consumed immediately before they lose their appeal.

Relation to previous work

The use of such temporal and rhetorical expressions is not new. "Recent" joins a proud tradition of vague qualifiers, just ahead of "emerging evidence," "growing body of literature," and "some studies suggest." Previous studies have shown that terms like "currently," "emerging," or "novel" are often used more to signal innovation than to accurately reflect timing.

Conclusion

In this study, we found that the term "recent" in biomedical literature can refer to anything from last month's preprint to a study published before the invention of the mobile phone. Although some fields and phrases showed more temporal discipline than others, the overall picture is one of creative elasticity. Authors may continue to deploy "recent" freely, but readers and reviewers might want to consider whether it is recent enough to matter.

ORIGINAL RESEARCH Observational study

Changes in diversity language in National Institutes of Health grant awards

Neil Mehta,[1] Anupam B Jena,[2 3 4]

Objective To assess changes in the prevalence of diversity language in National Institutes of Health (NIH) grants in 2024-25.

Design Retrospective longitudinal analysis.

Setting United States.

Sample 17 701 abstracts of research grants awarded by the NIH between 1 January 2024 and 20 June 2025.

Main outcome measures Prevalence of diversity language in NIH awarded grants measured by month. A within grant analysis compared 2024 and 2025 versions of the same grants, and the net change in the number of words reflecting diversity language versus all words was calculated, using thousands of randomly sampled lists generated from the abstracts to provide control words.

Results The rate of words reflecting diversity language decreased sharply between October and November 2024, from 11.11 to 5.42 words per 1000, a 51% relative decrease. The decrease persisted through 2025, with an overall relative decrease of 25% between January 2024 and June 2025. In a within grants analysis, among 1967 pairs of identical grants in 2024 that were non-competitively renewed in 2025, words reflecting diversity language comprised fewer than 1% of all words but accounted for about 10% of all deleted words between 2024 and 2025, with 8.28 words per 1000 deleted. This decrease was lower than that of all randomly sampled lists of control words.

Conclusions Words reflecting diversity language have decreased across the abstracts of research grants awarded by the NIH.

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WHAT IS ALREADY KNOWN ON THIS TOPIC

- News reports have indicated that US federal agencies have recently limited or discouraged use of words related to diversity, health inequities, and other scientific subjects commanding political attention in National Institutes of Health (NIH) research grants
- Lists of diversity language compiled by news agencies, including words such as "women," "gender," and "sexual orientation" have circulated among researchers
- News reports suggest that researchers may be modifying their language or research topics to align with federal priorities

WHAT THIS STUDY ADDS

- This study found that words reflecting diversity language have appeared less frequently in NIH grant awards since 2024, with a 25% relative decrease between January 2024 and June 2025
- In a pairwise analysis of the same grants observed in both 2024 and 2025, words reflecting diversity language were deleted from abstracts at a 10-fold higher rate than other words during revisions of non-competing continuation grants

Introduction

News reporting has flagged the removal of words concerning diversity, equity, inclusion, and similar terms from grants funded by the US National Institutes of Health (NIH).[1-3] Lists of words reflecting diversity language have been compiled by news agencies using manual reviews and circulated across researchers.[1-5] For example, the *New York Times* compared the text of more than 5000 government websites before and after the 2025 US presidential inauguration using a large language model, and manually reviewed examples of words flagged by the large language model that had subsequently disappeared across this period.[1] According to news reporting, some of these terms have been used to automatically mark grant proposals for review.[1 6]

While news reports and initial anecdotes suggest that recent policies have motivated removals of diversity language from NIH grant applications and awards, this issue has not been rigorously evaluated. We used publicly available information about grants awarded by the NIH in 2024 and 2025 to measure changes in use of diversity language in NIH grant awards.

Methods

We conducted two analyses to examine changes in diversity language in abstracts of NIH awarded grants during 2024 and 2025, using a list of words based on existing news reports from the *New York Times* and PEN America (the full list of words, which we term diversity language, is available in the supplementary appendix). Grant abstracts were obtained from the NIH RePORTER.[10]

We tabulated the rate of words reflecting diversity language per 1000 words overall in abstracts of newly awarded grants, by month, between 1 January 2024 and 20 June 2025. We plotted rates of appearance of words reflecting diversity language, by month, to examine whether these words were less likely to appear in grant abstracts after the 2024 US presidential election.

It is possible that changes in the use of diversity language over time may not reflect explicit censoring, but changes in actual proposed research to better match new funding priorities. To investigate this possibility, we also analysed newly awarded or non-competitively renewed grants in 2024, excluding grants with subprojects, which were non-competitively renewed in 2025. These grants require routine progress

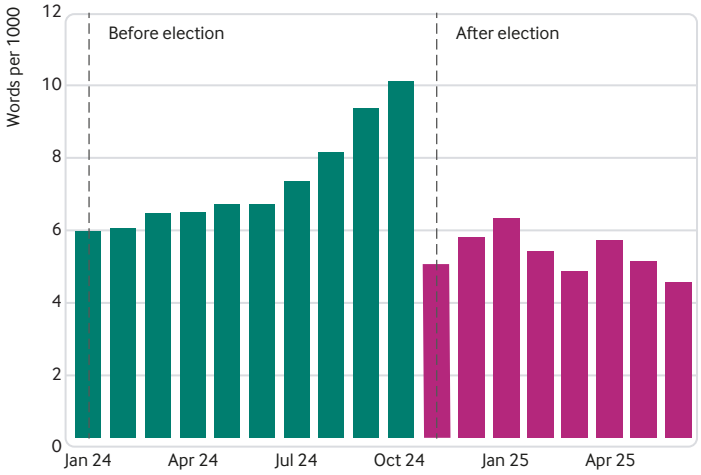

Fig 1 | Prevalence of words reflecting diversity language in abstracts of research grants awarded by the National Institutes of Health, by month, before and after the US presidential election. An interactive version of this graphic and downloadable data are available at https://public.flourish.studio/visualisation/26583068/

reports for multi-year projects that are already approved and do not compete with other grants for funding.[11] Studying changes in language use among non-competitively renewed grants allowed us to study changes in abstracts between 2024 and 2025 for the same set of grants. In this pairwise analysis, we calculated the overall change in the number of words related to diversity between 2024 and 2025. We used this figure to calculate an average deletion rate, in words per 1000, of words reflecting diversity language between these two periods.

To determine whether the observed deletion rate of words reflecting diversity language could be due to chance alone, we sampled lists of control words from grant abstracts and calculated the average deletion rate for words in each control list. Our goal was to assess whether the average rate at which words related to diversity were deleted from abstracts was greater than the rate of deletion observed for random control words in 2025 than in 2024. We conducted this analysis in four ways: first, for each of the 248 diversity related words, we sampled an additional unique, random word from all words in 2024 abstracts, and compiled them into a list (each control list had 248 words). We then calculated the total deletion rate of the words in this control list. We repeated this process 1000 times to generate 1000 control lists and then used these control lists to compute the average deletion rate of control words between the same grants in 2024 versus 2025.

Second, since only 88 of 248 diversity related words appeared in 2024 abstracts, we modified our approach to create 1000 control lists, each containing 88 random control words. Using these lists, we calculated the average deletion rate of control words between the same grants in 2024 versus 2025.

Next, we repeated the first analysis but excluded control words that appeared fewer than five times in text, included non-letter characters, or were common words that offer little meaning (such as the, a, is, and, in, an). Lastly, we combined the constraints in the second and third analyses.

Patient and public involvement

This study was a retrospective observational study. Patients and the public were not involved in the design, conduct, interpretation, or writing up of the study.

Results

Overall, 17 701 grants were analysed. Beginning in November 2024, we observed a sharp decline in the monthly prevalence of words reflecting diversity language after a gradual increase throughout the preceding period (fig 1). In total, 5.69 fewer diversity related words per 1000 were used between October 2024 and November 2024, a 51% relative decrease. Further, we found 6.45 words related to diversity per 1000 words in abstracts of grants awarded in January 2024, compared with 4.84 in June 2025, a 25% relative decrease.

In a within grant pairwise analysis of 1967 grant pairs, we found 53 fewer diversity related words across pairs of otherwise identical grants, equivalent to a net word deletion rate of 8.28 per 1000 words (table 1). Although the rate of deletion was low, words reflecting diversity related language comprised fewer than 1% of all words in our sample but accounted for about 10% of all deleted words, meaning that words reflecting diversity language in 2024 grants were deleted at a 10-fold higher rate than other words from those same grants in 2025. We found a greater net decrease in words reflecting diversity language than that observed in all lists of control words, suggesting that the reduction in use of diversity related words was unlikely due to chance alone (fig 2 on bmj.com).

Deletion rate of words reflecting diversity language versus all other words in abstracts of research grants awarded by the National Institutes of Health with renewals in 2024 and 2025

	Year of grant award		Deletion rate* (per 1000 words)
	2024	2025	
No of words overall	751373	750828	0.73
No of words reflecting diversity language	6401	6348	8.28
No of all other words	744972	744480	0.66

*Number of words present in 2024 versions of a grant that were not present in 2025 versions of the same grant, divided by number of words in 2024 grants. For example, of 6401 words reflecting diversity language in 2024 grants, 53 of these words were not present in 2025 versions of those same grants, for a deletion rate of 53 of 6401 words, or 8.28 per 1000 words.

Discussion

Principal findings

In a text analysis of abstracts of new NIH grant awards, we found a decrease in the prevalence of words reflecting diversity language since the 2024 US presidential election. One strength of our approach was the pairwise analysis of the same grants in 2024 and 2025, which showed a change, albeit small, in the language used to describe the same research.

Limitations of this study

Our analysis has several limitations. First, we analysed changes in usage of specific words that were identified in news reporting, because we were not aware of a specific, authentic list of prohibited words. Secondly, we did not separate words reflecting diversity language into separate domains (eg, racial equity). Thirdly, our analysis relied on a limited period of eight months. Additionally, we used lists of terms compiled by news outlets, some of which lack a public methodology. However, these lists have directly shaped researchers' perceptions and remain a key resource in instances of researchers pre-emptively removing diversity related language from grants.

Conclusions

In an analysis of abstracts of grants awarded by the NIH, we found that words reflecting diversity language appeared less frequently in 2025 compared with abstracts of grants awarded in 2024.

Medicine meets melody—Lullaby Hour brings harmony to the neonatal ICU

A musical charity provides moments of calm for babies and parents amid the intensity of neonatal wards. **Anna Caldwell** talks to the doctors and musicians involved

In 2025, Music in Hospitals & Care has delivered more than 90 hours of live music to neonatal intensive care units (NICUs) in the UK, reaching more than 1000 seriously ill babies.

The charity has been providing soothing tunes for babies and parents through its Lullaby Hour sessions since 2017, bringing a sense of calm to intensive medical settings, including adult intensive care units. Vicky Daborn Tedder, impact and insights manager at Music in Hospitals & Care, tells *The BMJ*, "We really see that the music makes such a difference, and it becomes a necessity, not just a nicety."

The charity's musicians have songbooks from which parents choose something to be played to their baby—but they also take requests, creating tender moments amid the daily challenges of life in the NICU.

Mica Bernard, singer and guitarist, tells *The BMJ*, "One couple, who were pregnant on their wedding day, said that their first dance song was 'The Book of Love' [by the Magnetic Fields]. So, they asked me to learn it because they were kind of dancing as a three on that day, and they wanted it as their special song as a three now."

Healing harmonies

Several studies have found a positive effect of music therapy on preterm babies in NICU, including lowering heart rate and respiratory rate, as well as increasing feeding volume, although a 2021 meta-analysis high-lighted the low certainty of the evidence.

Bernard says, "When I'm singing to the baby, I can literally see their heart rate calming down or their oxygen increasing.

MUSIC IN HOSPITALS & CARE

These music sessions not only help parents bond with their baby but also provide a moment's respite from an uncertain and stressful situation

I think it goes to show just how built in music is for humans."

Contrary to some parents' concerns, research by Music in Hospitals & Care shows that babies are frequently observed falling asleep or staying asleep during the live music. Sometimes it's played during distressing times such as clinical procedures and nappy changes.

Jay Banerjee, neonatal consultant at the Imperial College Healthcare NHS Trust, tells *The BMJ*, "Having a baby in a neonatal intensive care unit is a difficult and traumatic time for babies and their families, so to be able to provide moments of calm through Lullaby Hour is something we're incredibly proud of.

"These music sessions not only help parents bond with their baby but also provide a moment's respite from an uncertain and stressful situation. The feedback from families and the clinical team here has been universally positive."

Finding normality in the NICU

The bonding element of Lullaby Hour is particularly important for parents who can't hold a baby who is in an incubator.

You can donate to Music in Hospitals & Care at mihc.org.uk/donate/big-give/

Bernard explains, "Often, if it's the first time I've sung to a parent, it's the perfect outlet for them to be able to cry. Sometimes when a traumatising situation happens, it can be really hard to let go of those emotions, so it often feels like I walk into a room and there's so much tension, with parents trying to be strong for their baby. The music helps them get in touch with what they're feeling."

The music also provides some sense of normality in intensive care wards. Gail Scott-Spicer, chief executive of Imperial Health Charity, which delivers arts programmes to hospitals, tells *The BMJ*, "The environment of a neonatal intensive care unit is, of course, quite overwhelming. It's intense—not just the situation that the parents and babies are in but also the environment. There's a lot of machinery, it can be quite noisy, and I know that the wards work really hard to reduce the noise levels, but at the end of the day it's a very clinical environment.

"To be able to bring a bit of 'normal' into that situation starts to explain the really positive health outcomes for the babies, and it reduces stress and anxiety for the families."

Anna Caldwell, freelance journalist, London

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