Measuring the impact of interventions to retain staff: the case for staff reported experience and outcome metrics

Viewpoint submission

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There is [broad agreement](#) that "care of the patient requires care of the provider." Staffing has long [been recognized](#) as a constraint on service delivery in healthcare, with workforce challenges the top concern cited by [hospital CEO's in 2022](#). Without intervention to address underlying issues, staffing [constraints](#) are likely to [increase](#). The COVID-19 pandemic accelerated [burnout among health care workers](#), with growing numbers expressing their intent to leave health care altogether. Turnover is [financially costly](#) and [negatively impacts](#) various facets of organizational performance, including [productivity and care quality](#). The imperative to retain staff has prompted examination of the factors [contributing to intention to leave](#), as well the links between well-being and turnover. As part of their call for addressing well-being throughout the health care workforce, [Rotenstein et al.](#) emphasize the importance of measurement. We agree that measurement can enable more nuanced understanding and inform interventions to improve staff experience and key outcomes such as retention. We propose and illustrate an approach below.

Measurement to support timely and targeted interventions

Measurement has driven interventions to improve patient safety and care provision, with patient reported experience and [outcome](#) measures ([PREMS and PROMS](#)) providing supporting insights. Similarly, measurement can strengthen our understanding of workforce problems and interventions to mitigate them. This requires gathering systematic evidence of the impact of specific organizational and systemic interventions – including differential and interdependent effects for groups of workers (by care area, profession etc.) and outcomes (e.g., reducing hours versus leaving the organization for retention). Change itself can be disruptive and can impose additional burdens on staff. Prioritizing interventions known to be relevant and beneficial is vital.

Although some systems have started to measure and monitor staff indicators, these efforts can be more widespread, systematic, and complemented by measurement of specific drivers of workforce experience related to key outcomes (e.g., job (dis)satisfaction that is related to intention to leave). Below, we outline what we name 'staff reported experience measures' (SREMs) and 'staff reported outcome measures' (SROMs). Introducing them is a necessary step towards prioritising, targeting, measuring, and refining – and therefore more consistently and successfully implementing – interventions to improve health worker retention and staff experience and outcomes more broadly.

We suggest that researchers and health systems collaborate to develop a core set of SREMs and SROMs. The former would track staff experience of work and workload, the work environment (e.g., perceived supervisor and co-worker support), and employment related factors such as pay satisfaction. The latter would track staff reported outcomes (e.g. intention to leave), which would provide information beyond that available to organisations through day to day operations (e.g., such as individuals cutting back hours, leaving a post). Others have similarly noted the need for worker related key performance indicators (KPIs) to prompt and inform adjustments. These might include an employment-oriented equivalent of the net promoter score. Our labelling of these measures is intentional and symbolic of their centrality to effective and sustainable healthcare service delivery. Crucially – as Rotenstein et al. point out – experiences and outcomes should be measured for all staff, not just physicians.

SREMs and SROMs would have two main uses. First, monitoring the prevalence and intensity of outcomes as well as the experiential and objective drivers influencing distinct outcomes (e.g., percentage of days understaffed; number of messages received/responded to) is necessary and can inform targeted intervention. Large scale and longitudinal monitoring efforts, such as the

annual National Health Service (NHS) staff survey in the UK, have been highly impactful in establishing an agenda for action.

Second, SREMs and SROMs would be useful in measuring the impact of interventions to improve staff experience and outcomes. As is the case for PREMs and PROMs, SREMs and SROMs should ideally be measured pre- and post- intervention, to help identify beneficial interventions and provide timely insight into whether, to what extent, and why staff experience and outcomes vary. Used in this way, measurement could support the development of an evidence-based registry of interventions and a toolkit for intervention. Successful examples from, and resources targeted to, health care organizations could be collated as a resource, similar to the National Academy of Medicine (NAM) compendium of resources for improving clinician well-being.

We provide an illustration using retention – a key yet relatively under-researched issue facing health care organizations. The National Academies of Sciences, Engineering, and Medicine (NASEM) developed a three-level system model of clinican burnout and well-being, highlighting potential interventions around frontline care delivery, health care organization, and the external environment. Exhibit 1 suggests retention-related measures aligned to these levels. Mapping measures for conceptually distinct outcomes of interest (e.g. burnout versus retention) is helpful as measures may be used in different ways, depending on the issue being considered. For example, organizations may consider factors driving intention to leave, or how intention to leave impacts dimensions of organizational performance.

Exhibit 1: SREMs, SROMs, and Other Retention-Related Measures of Clinician Burnout and Well-Being

Level of NASEM's system model of clinician burnout and **professional wellbeing**	**Retention-related Staff Reported Experience Measures (SREMs)**	**Retention-related Staff Reported Outcome Measures (SROMs)**	**Other Retention-related measures**
Front-line care delivery	Work & work environment: - Job/work satisfaction - Supervisor satisfaction/perceived supervisor support - Co-worker satisfaction/peer support - Workload	Job search activity Intention to leave (including a variety of forms of leaving): - Leave organization - Leave profession - Retire - Reduce hours	Absenteeism % of days understaffed Excess hours worked
Health care organization	Affect towards the organization: - Affective organizational commitment - Organizational fit Instrumental attachment: - Pay satisfaction - Promotion satisfaction - Perceived lack of alternatives - Perceived sacrifice Sense of obligation/normative attachment: - to the organization - to the profession Other: - Turnover contagion - Push work shock (e.g. moral injury)	Reported reasons for voluntary turnover	Pay Total rewards Voluntary turnover levels (including disaggregation by unit, profession, and forms of leaving) Cost of replacement
External environment	Job embeddedness or Extraorganizational ties - Community fit - Community sacrifice - Community links Shocks - Pull work shock e.g. unsolicited job offer	Benchmarks to enable sector comparison	Sector absence rates Sector pay & total rewards Sector voluntary turnover rates

Source: Authors' identification of potential retention-related measures, informed by research on employee turnover from Zimmerman et al. and Hom et al.

First steps to developing SREMs and SROMs

A straightforward first step is identifying a range of evidence-based experience as well as outcome measures. This work has started, with a particular focus on burnout and wellbeing. It could be expanded to include measures and drivers for other important and conceptually distinct outcomes, including retention as considered here, and other dimensions of employment, such as employee engagement. Evidence for and measures of relevant drivers and outcomes already exist and can be built upon. The second step – obtaining consensus on a core set of SROMs and SREMS – is more challenging. However, having a core set of agreed upon measures would enable comparative analysis, including the identification of beneficial interventions. The National Institute for Occupational Safety and Health (NIOSH) Worker Well-Being Questionnaire and associated resources for action provide an example of how this might be approached.

Akin to a core outcome set, SROMs and SREMs should be made widely available as a resource. Linzer et al. highlight the potential for organizational dashboards focused on opportunities for intervention. Systematizing review to track trends over time and evaluate the impact of interventions would help to ensure that organizations can use SREMs and SROMs to achieve meaningful improvements in provider experience and outcomes, including retention.

Investing in staff is worth the effort

Rotenstein et al. suggest that minimising the additional work of new measurement might make it more likely to happen. This is likely true. But workforce shortages are *the* major challenge facing many developed health systems. Investing in and improving staff experience and outcomes is essential and must be prioritized accordingly. Developing better ways to systematically measure and monitor SREMs and SROMs and then assessing the impact of organizational interventions to improve health worker employment are vital.