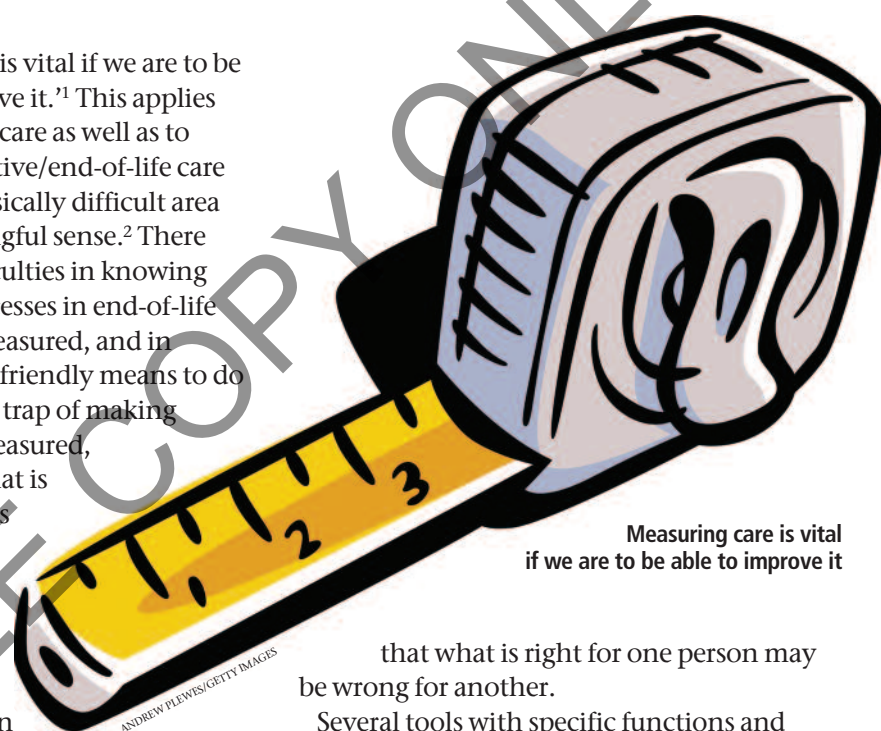


# Measuring quality improvements in end-of-life care: the ADA audit tool

An online audit tool has been developed to measure end-of-life care in various settings, including primary care, hospitals and care homes. **Keri Thomas** and **Collette Clifford** explain how it works in supporting continuous quality improvement

Measuring care is vital if we are to be able to improve it.<sup>1</sup> This applies to end-of-life care as well as to other areas, and yet palliative/end-of-life care has always been an intrinsically difficult area to measure in any meaningful sense.<sup>2</sup> There have been particular difficulties in knowing which outcomes and processes in end-of-life care can be realistically measured, and in developing a simple, user-friendly means to do so. We can all fall into the trap of making important what can be measured, rather than measuring what is important, not least in this sensitive area around death and dying, where clinical deterioration is the norm, ethical minefields abound, and individual variations mean



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that what is right for one person may be wrong for another.

Several tools with specific functions and scope already exist. They are largely used within the specialty of palliative care and in hospices.<sup>3</sup> As yet, however, they are not in general use in more generic settings, such as primary care, care homes and hospitals.<sup>4</sup>

Measurement in end-of-life care often requires the use of several complementary 'proxy outcome measures', in an attempt to describe the composite whole. These measures include, among others:

- The number of days spent in hospital
- How well symptoms are controlled
- Whether the preferred place of care/death is attained
- Whether discussions about advance care planning take place and are recorded
- Anticipatory prescribing
- Whether the patient dies in hospital, at home or elsewhere.

## Key points

- Knowing which outcomes and processes in end-of-life care can be realistically measured, and developing a simple, user-friendly means to do so, has been difficult.
- The After Death Analysis (ADA) audit tool, developed as part of the Gold Standards Framework programmes, is a simple online tool that can be used in a number of settings to support quality improvements in end-of-life care.
- The ADA tool focuses mainly on patterns/processes and on outcomes, giving indications of staff attitudes and approaches via the 'significant event analysis' (what went well, what did not go well, how could this be improved).
- The ADA tool can be regularly refined in response to feedback and adapted for different uses in different areas.

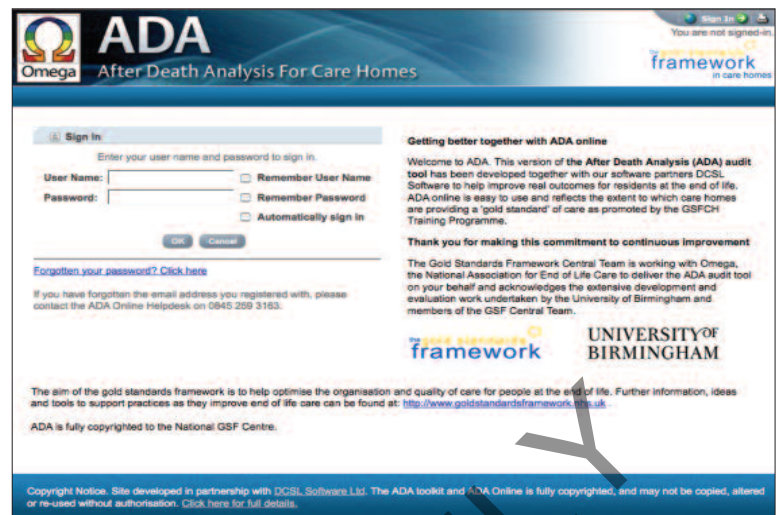
While it is important to focus on outcomes that matter to patients, as affirmed by the newly developing Patient Reported Outcome Measures (PROMS),<sup>5</sup> it is acknowledged that softer, more qualitative areas are important too; for example, the attitudes, awareness, confidence, general approach and sense of dignity and respect shown by staff, as perceived by patients and carers. One approach, as summarised in a summary of evidence for the Gold Standards Framework (GSF) Care Homes Training Programme,<sup>6</sup> is to include these three core areas of measurement:

- Qualitative, less tangible assessments of staff attitudes, awareness and confidence
- Patterns of working and processes
- Tangible outcomes.

## Audit as a quality improvement tool

As a means of improving the quality of care, audit is of particular value to clinicians; it is becoming of increasing importance as part of the quality assurance processes, inspection and revalidation. Robin Burgess, Chief Executive of the newly developed Healthcare Quality Improvement Partnership in England, states that 'the link between clinical audit and quality improvement is clear – it is proven to lead to improvements in patient care and should be practised in all areas of healthcare'.<sup>7</sup> The National Audit Office report *End of Life Care* had considerable national impact, affirming the importance of this area in assessing alternatives to hospital admissions, with humanitarian and economic benefits, while pointing to the current inequities of provision and making recommendations for further action.<sup>8</sup>

The aim of audit measurement is to assess compliance, in clinical practice, with standards of best practice; to identify gaps and areas requiring further improvement; to respond appropriately; and then to assess whether this response has had an effect. The analysis of audit data can illuminate the unexpected, showing inconsistency in practice and gaps in care provision of which we were previously unaware. In addition, a key element is the benefit of the process itself, in taking time to measure and reassess care against the ideal standards. The process of audit can, in some hands, be as useful as the actual data that it provides and, if used well, can be of enormous benefit in catalysing real changes at grassroots level. But how do we do this amid the complexity of service provision in end-of-life care?



### Box 1. Key areas covered by the After Death Analysis (ADA) audit tool

- Patient choice: number of patients dying in their place of choice; reasons why they might die elsewhere; advance care planning discussions regarding patient preferences
- Hospitalisations: hospital bed-days, crisis admissions, hospital deaths
- Pre-planning: anticipatory assessment of care needs; inclusion of patients on the palliative/supportive care register; anticipatory prescribing; use of handover forms
- Local services: use of local services; gaps in service provision; support of local commissioning of additional services
- Systematic review: is there equity of care between cancer and non-cancer patients? Are all aspects of care covered? What is the overall team reflection? Could care have been better?

The After Death Analysis audit tool was developed as part of the Gold Standards Framework programmes in primary care, care homes and hospitals

## The After Death Analysis audit tool

The After Death Analysis (ADA) tool<sup>9</sup> is a web-based end-of-life care audit tool that was developed as part of the GSF programmes in primary care, care homes and hospitals. The GSF programmes in end-of-life care describe key standards ('gold standards' or best practice) to aim for. The programmes present frameworks in which to attain these standards, using a selection of evidence-based tools, tasks and resources that pragmatically support movement towards best practice. This led to the process of auditing these standards, and hence to the development of the ADA audit tool as an improvement tool.

The ADA tool has been used as a comparative and a spot-check benchmarking tool in different settings; it has been extensively evaluated and refined; and it is now available

## Service improvement

as a simple online audit tool managed by the charity Omega, the National Association for End of Life Care, which provides IT support, a helpdesk and feedback. The ADA tool has reached a high level of maturity as a means of assessing provision of care for patients nearing the end of life. It can, therefore, become a key audit tool to aid future improvements.

Through assessment, reflection on findings and further improvements, real practical changes can be made to improve the quality of care that is delivered to dying patients, with any life-limiting conditions and in a variety of settings. Box 1 shows key areas covered.

### What can the ADA tool be used for?

The ADA audit tool was developed seven years ago as part of the work of the National GSF Centre in collaboration with the University of Birmingham end-of-life care team. It has been refined and improved following in-depth evaluation and use in different settings. Relating to the three core areas of measurement outlined above, the ADA tool focuses mainly on patterns/processes and on outcomes, giving indications of staff attitudes and approaches through the 'significant event analysis' at the end (what went well, what did not go well, how could this be improved). It is now being used in a wide range of settings to assess and improve the care given to patients nearing the end of life.

The ADA tool was originally developed to assess and improve the consistency of use of the GSF in general practices and in care homes. Although it remains an integral part of the GSF training programmes, the tool can now be used independently of the GSF. It helps practitioners to ask themselves, 'Did this patient actually receive best practice care as far as we can assess it?'; for example:

- Was the patient asked about their preferred place of care?
- Was there an advance care planning discussion with the patient?
- Were anticipatory drugs left in the patient's home?

The ADA tool tries to bridge the gap between theory and practice, in the same way as variance measures do when they are used as part of integrated care pathways. Box 2 lists the benefits of using it. The ADA tool contributes to the range of measures available to those working in end-of-life care who wish to evaluate the development and impact of their services. As such, it helps meet a policy requirement to

### Box 2. Benefits of the After Death Analysis (ADA) audit tool<sup>9</sup>

#### The ADA audit tool:

- Is a simple and quick online tool incorporating IT support and a helpdesk and providing instant feedback
- Provides constructive feedback; the process of reflection on audit data in itself provides guidance for improvement
- Helps achieving key policy targets; for example, quality markers
- Highlights gaps in service provision; for example, in the out-of-hours access to drugs or in nursing services
- Records number of hospital admissions, length of hospital stays and number of deaths in hospital
- Suggests and records advance care planning discussions, including preferred place of care and 'do not attempt resuscitation' orders
- Records number and proportion of people dying in their preferred place of care
- Records number of patients included on the practice's palliative Gold Standards Framework (GSF) register compared with total number of deaths; records proportion of non-cancer patients to cancer patients on the register
- Records number of unexpected deaths (that is, deaths that were not predicted within a reasonable time)
- Helps in expanding the use of anticipatory prescribing and the uptake of care pathways/protocols for the final days of life (for example, the Liverpool Care Pathway for the Dying Patient)
- Helps to improve community services and informs cost-effective commissioning by assessing the quality of end-of-life care, through the level of adoption of the GSF in practices and the impact on patient care through proactive co-ordination

**Table 1. Different versions of the After Death Analysis (ADA) audit tool for different contexts/settings**

Tool/setting	Type	Use/example
ADA primary care <sup>11</sup>	Comparative	Before and after implementation of the GSF; now available as part of the new 'Going for Gold' training programme for primary care
	Snapshot	The NHS End of Life Care Programme funded a snapshot audit in primary care that was conducted in 2009 <sup>12,13</sup>
ADA care homes <sup>14,15</sup>	Comparative	Before and after the GSF training and accreditation programme for care homes
	Snapshot	Used as one of the four factors in the national GSF accreditation process for care homes
ADA hospitals	Comparative	Under development as part of Phase 1 of the GSF pilot for acute hospitals
Other services, individuals or countries		In process

GSF = Gold Standards Framework

have a means of measuring end-of-life care service provision, as stated by the quality markers and measures document of the *End of Life Care Strategy*.<sup>10</sup> At another level, our experience indicates that practitioners will use the data to inform their own assessment of service provision.

Using hospital death rates and hospital admissions as an example, Figures 1a and 1b show how practitioners can monitor service improvements with the help of the ADA tool.

While the tool is presented as a single entity, it has been tailored to meet audit needs in a range of contexts and settings (see Table 1). It can be used for comparative work to monitor trends over time. In primary care and the care home sector, the ADA tool is now well developed for use in this way. As the GSF is rolled out in secondary care (the hospital sector), the ADA tool is being adapted for use in that environment.

One-off audits can be used to offer ‘snapshots’ of activity across a wide sector. A national primary care snapshot audit using the ADA tool for primary care was undertaken in England in 2009, supported by the NHS End of Life Care Programme.<sup>12,13</sup> It involved the assessment of all patient deaths that occurred in February and March 2009 in all practices in 15 primary care trusts (PCTs) across the country. This was the largest audit of its kind in end-of-life care in England and has accumulated data from 502 general practices and 4,487 patient deaths, producing a picture of activity, both locally and nationally, that will inform further developments and commissioning of services; for example, it was noted that only one-quarter of all patients were included on the GSF register, and only one-quarter of those were non-cancer patients.

The potential for further improvements remains and the ADA tool can be regularly refined in response to experience, evaluation and feedback. The software can be fine-tuned to enhance the tool’s accessibility, improve its interface, ensure that it is user-friendly, and support means to further improve its quality; for example, through suggested help buttons. To meet the needs of those providing and commissioning services, as well as patient and carer priorities, there is a need to ensure that audit questions remain relevant and accurate.

This ongoing process of refinement takes place through regular reflection and evaluations; through seeking, and listening to,

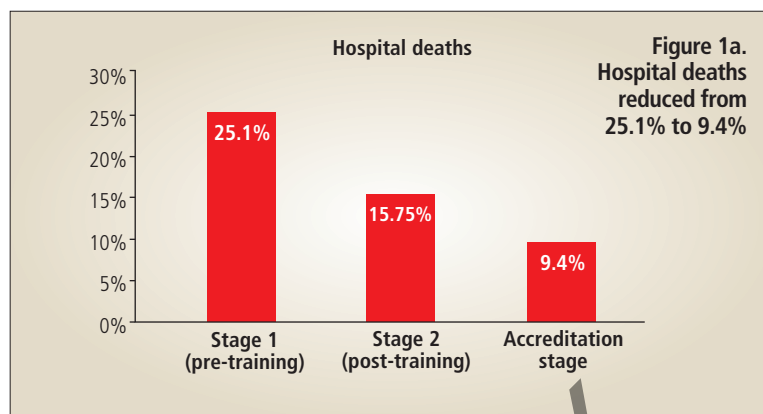


Figure 1a. Hospital deaths reduced from 25.1% to 9.4%

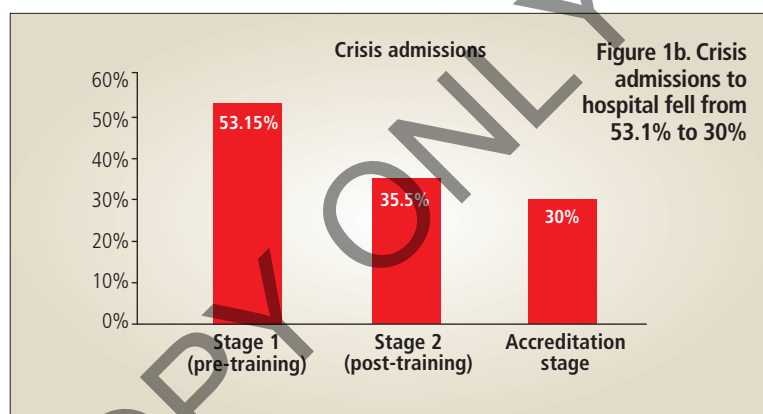


Figure 1b. Crisis admissions to hospital fell from 53.1% to 30%

Figures 1a and 1b. Examples of After Death Analysis (ADA) audit results in care homes using the Gold Standards Framework Care Homes Training Programme (sample = 5 resident deaths before training [stage 1], 5 after training [stage 2], and 5 at accreditation stage [stage 3])

feedback from users; and through incorporating means to ensure that the focus remains on the key measurable activities.

It is acknowledged that other audit tools support similar aims, and that the ADA tool has limitations and is not appropriate for every situation. Its use may be strengthened if it is combined with other qualitative feedback. Specifically, the ADA tool could be used in combination with the assessment of carers’ experience or with patient feedback at an earlier stage. It is also more effective when used as part of the quality improvement training linked directly to the key areas for improvement, as in the new GSF primary care training programme ‘Going for Gold’.

## Conclusion

The use of audit is known to be a key lever in improving the quality of patient care. The ADA audit tool (summarised in Box 3) is one example of a simple online audit tool that can be used in a number of settings and in a variety of ways to support quality improvement in end-of-life care. There is more work to be done to develop and extend it further, but it is

## Box 3. Summary of the After Death Analysis (ADA) audit tool

### The ADA audit tool:

- Was developed by the Gold Standards Framework (GSF) team to assess the actual delivery of end-of-life care at patient level, in line with best practice guidance within the GSF
- Is recommended as good practice by the *End of Life Care Strategy*,<sup>16</sup> specifically in the quality markers and measures document (section 2.11).<sup>10</sup> It helps attain several local and national targets. It is endorsed for use in primary care by the Royal College of General Practitioners
- Is a user-friendly, quick to complete, web-based audit tool providing rapid data analysis. It assesses patient outcomes, use of services and levels of adoption of the GSF, with suggestions for improvements in care. It has accumulated data with which to benchmark against national standards
- Is a means of improving care through simple assessment of attainment of standards. It is found to be a sensitive indicator of care given. It records:
  - Crisis hospital admissions
  - Hospital bed-days
  - Advance care planning discussions and preferences
  - Place of death
  - Proportion of patients dying in their preferred place
  - Use of specific services
- Is outcome-based, focusing on actual patient activity. It can act as a catalyst for improvement, leading to maintenance of high standards or further development
- Enables general practices and care homes to review their own end-of-life care and make changes to it to help future patients or residents. It allows primary care trusts (PCTs) and other organisations to identify gaps in service provision and shows the improvements once the gaps have been addressed
- Has questions that can mostly be answered by yes or no, or leads to a drop-down menu of options. The 'significant event analysis' section encourages team reflection and qualitative feedback. The usual sample is 5–10 recent patient deaths in one location, but other samples are possible
- Can be used for snapshot benchmarking or to compare care before and after an intervention (such as a training programme, local enhanced service or reward scheme). It has been adapted for use in primary care, in care homes, as part of the GSF accreditation process. It is now being adapted for use in acute hospitals
- Allows online feedback to be given through simple bar charts. Progress is benchmarked against a unique store of national data
- Is supported by Omega, the National Association for End of Life Care, through an online audit service, dedicated helpdesk and the production of feedback reports
- Is integrated into the GSF training programmes for care homes and primary care. It can be undertaken separately and commissioned by individual health organisations such as PCTs. Its potential for wider use is currently being explored

already of great benefit, as part of a training programme or other interventions, in supporting continuous quality improvement.

**For more information on the ADA audit tool, please visit:**  
[www.goldstandardsframework.nhs.uk](http://www.goldstandardsframework.nhs.uk)  
[www.omega.uk.net](http://www.omega.uk.net)  
[www.healthsciences.bham.ac.uk/research/life/service.shtml](http://www.healthsciences.bham.ac.uk/research/life/service.shtml)

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