Do self-reported ‘integrated’ continence services provide high-quality continence care?

ADRIAN WAGG¹², DEREK LOWE², PENNY PEEL², JONATHAN POTTER²

¹ UCL – Geriatric Medicine, University College Hospital, 25 Grafton Way, London WC1E 6AU, UK
² Royal College of Physicians of London – CEEu, London, UK

Address correspondence to: A. Wagg. Tel: (+44) 0207-380-9910; Fax: (+44) 0207-380-9652. Email: a.wagg@ucl.ac.uk

Abstract

Introduction: systematic collection of clinical outcome data remains the most difficult task in the measurement of clinical effectiveness. However, the examination of the relationship between organisational and clinical process of care may provide a surrogate measure of quality in care.

Methods: data from the 2006 National Audit of Continence Care for Older People were used to examine whether there was an association between organisational structure and standard of continence care for older people. ‘Quality’ scores were produced and the relationship between scores was examined.

Results: there were statistically significant correlations between organisational and process scores for continence care. Primary care scored higher than hospitals or care homes in regard to service organisation [median (IQR): 57 (45–68) vs 48 (36–65) vs 50 (38–55), P = 0.001]. Differences were less with clinical process scores for urinary incontinence (UI) [median (IQR): 42 (32–52) vs 40 (29–49) vs 43 (34–52), P = 0.06] and for faecal incontinence (FI) [median: 42 (34–53) vs 45 (36–55) vs 47 (41–53), P = 0.12].

Conclusion: those with an integrated service provide higher quality care to older people. The provision of high-quality care for continence appears to be dependent upon well-organised services with personnel who have the appropriate training and skills to deliver the care.

Keywords: quality of care, clinical effectiveness, older people, continence, elderly

Introduction

There is a paucity of effort to monitor the implementation of evidence-based guidelines regarding incontinence of either urine or faeces and their outcome [1]. In the National Health Service in England and Wales, a centrally commissioned clinical audit programme has been established to survey the effectiveness of care for a variety of conditions. Of these projects, the National Audit of Continence Care for Older People [2, 3] has reported wide variability in the standard of care for older people with urinary and faecal incontinence and upon the considerable differences in how care is provided, despite national guidelines on service provision. These guidelines promoted the concept of integrated continence services.
Do self-reported ‘integrated’ continence services provide high-quality continence care?

which were to be comprehensive and cohesive; covering both urinary and faecal incontinence for the whole population, regardless of age or place of residence and which allowed ease of access and no barriers to interagency referral [4]. To date there has been no attempt to confirm whether services based upon these expert consensus guidelines provide a high standard of continence care.

Systematic collection of clinical outcome data, debatably the most sensitive indicator of quality, remains the most difficult task in the measurement of clinical effectiveness, often due to limitation on resources for longitudinal follow up of surveyed cohorts. However, the examination of the relationship between organisational structure i.e. the personnel, skills, resources and knowledge available to care for people and the clinical process of care (what is actually done for people) may provide a surrogate measure of quality in care. A better quality of care should theoretically lead to an improved outcome for patients.

This study used data from the 2006 National Audit of Continence Care for Older People to examine whether there was such an association between organisational structure and standard of continence care for continence services for older people in the community, in hospitals and in care homes in England and Wales.

Study design and methods

Standards for measuring quality of care were derived from pre-existing work and government publications [4–6], and then further developed by a multidisciplinary steering group and a wide range of professionals with expertise within the continence field before progressing to a Delphi assessment to refine the criteria. Quality statements for which there was no supporting research evidence were arrived at by consensus of experts in the field. The resulting package was piloted and modified prior to the 2006 National Audit [7]. The audit method has previously been published but briefly; each participating site returned data on the facilities and organisation for care of continence received by their patients and also returned data on the care of 20 patients aged 65 years and over with urinary incontinence (UI) and 15 with faecal incontinence (FI) as defined by the clinical record. Data were based upon a cross-sectional retrospective audit of consecutively admitted patients to hospitals; consecutive patients were identified in a single General Practice in primary care and consecutive residents in care homes. Data were submitted via the Internet to a secure website, and anonymity was maintained for all data [2]. Organisational data were then scored in a binary fashion (factor present/absent) to produce a score which was then normalised out of a maximum of 100. The only exception to binary scoring was that a score of 2 was given to each service reporting itself as integrated, according to the definition contained in national guidance [4]. A scoring system for the process of care data for bladder and for bowel care was similarly developed. The bladder and bowel scores were applied at the patient level, and then for each site, the mean bladder and bowel scores were computed. The relationship between the organisational score and process of care scores was examined as well as the relationship between the quality of bladder and bowel care. Spearman’s correlation was used to measure the strength of correlation between scores, and the Kruskal–Wallis test was used to compare between care sectors.

No patient contact was required for the conduct of the audit. Advice from ethical committees was that permission was not required for this work as no intervention was involved. Data transfer was in accordance with standards of practice laid out by the Patient Information Advisory Group in the United Kingdom and adhered to the Data Protection Act 1998.

Results

The number of sites submitting data by sector were; primary care (108), acute hospital (187) and care homes (104). Most of these sites (primary care 85%, acute hospital 88%, care homes 71%) submitted all three types of data (organisational, process bladder and process bowel). The overall median organisational score was 50, i.e. at the centre of the scale with no evidence of floor or ceiling clustering at 0 or 100 (Figure 1), with an interquartile range (IQR) from 36 to 62. Quality of care scores were derived from data returned on 3385 community-dwelling, 6822 hospitalised and 2745 institutionalised older people. The factors included in both scores are shown in Table 1.

Detailed scoring structure is available online at: http://continenceaudit2006.rcplondon.ac.uk.

There were statistically significant correlations between organisational scores and quality of care scores for both urinary and faecal incontinence (Table 2). The strength of correlation for acute hospitals was lower than that for primary care and that for care homes was lowest of all. The relationship between the organisational score and the process of bladder care score for primary care is shown in Figure 2. The primary
Table 1. Factors included in the construction of the scores

<table>
<thead>
<tr>
<th>Organisational score</th>
<th>Bladder score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies and procedures</td>
<td>Documentation of symptoms,</td>
</tr>
<tr>
<td>Case finding and assessment</td>
<td>diagnosis and assessment</td>
</tr>
<tr>
<td>Structure</td>
<td>Examination</td>
</tr>
<tr>
<td>Integrated continence service</td>
<td>Treatment</td>
</tr>
<tr>
<td>Director/lead person</td>
<td>Care plan</td>
</tr>
<tr>
<td>Personnel</td>
<td>Communication/information</td>
</tr>
<tr>
<td>Designated referral pathways</td>
<td>Examination</td>
</tr>
<tr>
<td>Investigation and treatment facilities</td>
<td>Treatment</td>
</tr>
<tr>
<td>Staff training</td>
<td>Care plan</td>
</tr>
<tr>
<td>Practitioner competence</td>
<td>Communication/information</td>
</tr>
<tr>
<td>User evaluation of service</td>
<td></td>
</tr>
<tr>
<td>Continence products</td>
<td></td>
</tr>
<tr>
<td>Products are supplied on</td>
<td></td>
</tr>
<tr>
<td>clinical rather than cost?</td>
<td></td>
</tr>
<tr>
<td>Patients’/carers’ views sought</td>
<td></td>
</tr>
<tr>
<td>Rationing</td>
<td></td>
</tr>
<tr>
<td>Evidence-based information available</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Relationship between organisational structure for bladder and bowel care by care sector

<table>
<thead>
<tr>
<th>Spearman correlation</th>
<th>Organisational with bladder</th>
<th>Organisational with bowel</th>
<th>Bladder with bowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL sites</td>
<td>0.31, P &lt; 0.001</td>
<td>0.31, P &lt; 0.001</td>
<td>0.78, P &lt; 0.001</td>
</tr>
<tr>
<td>By sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care</td>
<td>0.44, P &lt; 0.001</td>
<td>0.49, P &lt; 0.001</td>
<td>0.81, P &lt; 0.001</td>
</tr>
<tr>
<td>Acute hospitals</td>
<td>0.26, P = 0.001</td>
<td>0.30, P &lt; 0.001</td>
<td>0.83, P &lt; 0.001</td>
</tr>
<tr>
<td>Care homes</td>
<td>0.32, P = 0.004</td>
<td>0.26, P = 0.02</td>
<td>0.73, P &lt; 0.001</td>
</tr>
</tbody>
</table>

Discussion

Using a simple score, a relationship between organisational strength and clinical care exists for continence care. This correlation is stronger for urinary incontinence than faecal incontinence. The correlation between organisation and care of bladder/bowel problem scores is strongest for primary care and, unsurprisingly, the scores for bladder compared with that for bowel care are strongest. For the most part though, these correlations are moderate (between 0.3–0.7) and tend towards weak (<0.3) in the care home sector. Why that might be, given that community continence services should have responsibility for provision to care homes within their geographical area, warrants further investigation. The perception of care home staff is that the services their residents receive appear to be of a lower quality than that provided for community-dwelling residents.

Organisational climate can be defined in terms of a team’s perceptions of organisational policies, practices and procedures [8], all factors covered by the organisational audit, though to what extent the perception of the service might have influenced the responses received is unknown.

Health care providers with an integrated service [3] appear to provide higher quality care to older people. Similar results have been shown in stroke and cardiac conditions [9]. The provision of high-quality care for continence appears to be dependent upon well-organised services with personnel who have the appropriate training and skills to deliver the care. Many of the organisational characteristics, such as implementing evidence-based clinical practice guidelines, identifying guideline champions and providing regular feedback on performance measures to providers, to enhance the delivery of care in their settings are not structural, but where well organised services exist, it may be more likely that these factors become ingrained into provision. The success of apparently integrated services in delivering high-quality care suggests that some of the crucial factors in overcoming redesign barriers such as systematically establishing infrastructure and actively developing champions, teams and staff have been successful [10]. The results also highlight the wide variation in organisation and delivery of continence care for older people, demonstrating a need for improvement.

Although the quality of returned data was high, the results of this study may have been biased by several factors; clinical data may have been selected to represent the best or poorest
Do self-reported ‘integrated’ continence services provide high-quality continence care?

Care from a particular site to demonstrate good care locally or poor care to justify bids for more resources. This would have weakened any observed association for that site. The numbers of participating primary care sites was low and the audit took place during a reorganisation of primary care; this may have led to only the more enthusiastic, better organised sites from that sector taking part. Additionally, the number of cases (20) per site may have been too low to be representative of the entirety of the clinical management offered to older people within that service. However, we are confident that the results are generally representative of the services provided across the country and of the standard of care provided to older people.

Concluding message

Organisational structure and possibly the underlying culture are a paramount in the provision of quality continence care for older people.

Key points

- The relationship between the organisational structure of services and the clinical process of care delivered by them appears provide a surrogate measure of quality in care.
- Organisational climate can be defined in terms of a team’s perceptions of organisational policies, practices and procedures and may be measurable.
- Self-reported ‘integrated’ continence services appear to deliver a higher quality of care for older people with bladder and bowel problems.

Funding

Funding for this study was provided by the Healthcare Commission.

References