## **Case study: BAETS National Endocrine Surgery Audit**

Since the launch of British Association of Endocrine and Thyroid Surgeons' (BAETS) web-based National Endocrine Surgery Audit in August 2005, more than 102,000 endocrine operations have been submitted by 311 Consultants on surgery to the thyroid, parathyroid, adrenal and pancreas. According to Mr David Scott-Coombes, past-Director of the BAETS Audit and Consultant in Endocrine Surgery at the University Hospital of Wales, Cardiff, UK, Dendrite's web-based clinical audit platform has played a pivotal role in demonstrating the professionalism of BAETS members and has become the 'crown jewel' of the association.

"One of the roles of the Executive Committee of the British Association of Endocrine and Thyroid Surgeons (BAETS) is to continually assess and promote the performance, standards and education of our members," explained Mr Scott-Coombes. "When I joined the committee, I was given the task of continuing the development of a national clinical audit. At the time, two BAETS members had undertaken a six-month pilot study of several centres looking at surgical performance and the initial findings were quite surprising. They reported that the types of cases varied greatly and some of the outcomes were worse than those published in the literature at that time. There was then a concerted drive by the association to develop a national clinical audit led by Mr Barney Harrison."

After meeting Dendrite in 2001, the first iteration of the national clinical audit was based-paper system and involved the surgeon completing the form and faxing the data to an office in London where the data was collated and then processed by Dendrite. It was a resource-draining process. Realising this, BAETS worked with Dendrite to develop a web-based data entry platform that would streamline the whole data collection process.

BAETS worked with the company on the dataset design to ascertain what data should be collected, as well as creating an interface that was user-friendly and simple to understand. Mr Scott-Coombes said that the experience and expertise of Dendrite was helpful when designing the dataset, in particularly avoiding data fields that may create areas of ambiguity.

Dendrite's solution was a to create an intuitive, easy-to-use interface that simplified data entry and allowed surgeons to get quick access to their outcomes data.

"It is important to note that a key challenge – one that remains to this day – is to get sufficient data so it is clinically meaningful but not collecting so much data that imputing the data becomes a burden," he explained. "Another challenge was to create enthusiasm for the audit among our members. In order to encourage members to voluntarily submit their data and a build a sense of cooperation, we decided at the outset that we must share the outcomes with members."

At the time, BAETS had about 60-70 members and they were conscious that by making data entry obligatory they might deter surgeons from joining the association. However, they believed that as a surgical profession they should promote the personal responsibility that all surgeons should know their outcomes and therefore be willing to submit their data.

According to Mr Scott-Coombes, Dendrite has been hugely influential in making BAETS achieve their goals, most importantly, by giving the association the confidence that a national clinical audit of endocrine and thyroid surgery could be established. Dendrite has also been instrumental in helping BAETS produce its series of National Endocrine Surgery Audit Reports.

"These reports are incredibly informative about how well our members are performing on both a collective and individual level. This is important for individual surgeons because they can use their outcomes data to demonstrate to their peers that they are delivering safe and effective surgical

practice. I think that if people are presented with the opportunity to engage in an audit process and they see that it is useful for them, then they will participate."

As a professional medical association, the reports are very useful to show to outside agencies, such as the Department of Health, to demonstrate that BAETS members are performing to high standards and that their outcomes can be benchmarked to international standards, he added.

"One of the first great achievements of the audit was to reset honesty within the surgical profession. The peer-reviewed publications in the 1980's and 1990's was dominated by Units reporting complications rates that were unrealistically low. The national clinical audit allowed us to show that the complication rate was far higher than was being reported and this has resulted in surgeons having more confidence in their performance and their data."

In addition, as the dataset has evolved and expanded, Dendrite emphasised to BAETS members the importance maintaining their historical data. The association has now acquired enough data to demonstrate a relationship between surgical volume and patient outcomes, and in the case of rare diseases showed that it is better for patients to be treated by a fewer number of surgeons.

"For the production of the report itself, you really do require expert analysts who can identify gaps in the data, as well as clean and interpret the data, and the Dendrite team has all of these attributes. We have developed an excellent relationship with Dendrite and although the Audit Lead will write the narrative, it will be underpinned by the expertise of Dendrite's analysts who will stop us from unintentionally reporting misleading outcomes."

In parallel with the national audit, NHS England in conjunction with Healthcare Quality Improvement Partnership (HQIP), has mandated that consultants publish their outcomes under the 'Consultant Outcomes Publication' programme. Dendrite's advice and assistance in helping BAETS members export their data, as well as designing the association's Consultant Outcomes Publication portal was been crucial in BAETS being one of the first surgical societies to publish individual consultant outcomes. The data for individual surgeons is also important as it allows them to demonstrate their expertise during appraisals and for revalidation purposes.

"The clinical audit is regarded by many as the 'crown jewel' of the BAETS. Our Registry is also recognised by ENT-UK as the sole UK-wide registry. Entry into the database is compulsory for members of both ENT-UK (who partake in thyroid surgery) and BAETS. The existence of our Registry/audit has greatly enhanced the professional standing of the BAETS whose membership has grown from 60 to nearly 300 members in the lifetime of the audit."

Collecting data also has the added benefit that it can be utilised for publishing peer-reviewed papers not only demonstrating the effectiveness of surgical procedures and processes, but also increasing the awareness of our society and specialty, he explained.

"I would whole-heartedly recommend Dendrite because in our own experience they have demonstrated time and again that they have the knowledge and experience of working with surgeons and ascertaining what they require," he concluded. "In addition, Dendrite has excellent back room support staff who are always quick to respond to our members with any questions and problems they might be experiencing. Ultimately, our national clinical audit has concentrated the mind of our members to think about their outcomes and their practice, and without Dendrite's contribution I do not think that would have been possible.