A Patient-Centered Approach to a Rural General Practice in Distress and the Search for a Solution

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ABSTRACT

Context: A general practice in rural UK (Cumbria) was overwhelmed by staff burnout.
Objective: To present a case study for how the staff of a practice came together, used data, agreed on a plan for improvement, implemented the plan, improved subjective distress, and objectively evaluated the intervention.
Design: We conducted an audit using the electronic health record for patients coming to the practice 5 or more times annually from 2008 to 2012 (frequent attenders). We planned an intervention to reduce utilization (frequency of visits) while still serving patients. The intervention used a genogram, psychoeducation, and up to six 30-minute sessions of solutions-focused psychotherapy, in which difficult interpersonal relationships were identified and efforts were made to resolve 1 major problem related to those relationships.
Main Outcome Measures: Quantitative data (number of visits per year) and qualitative data about the changes that resulted in the practice from the audit and the intervention.
Results: The frequency of visits for patients with mental health conditions (41.0% of all frequent attenders in the practice) dropped significantly from 2007 to 2012 (p = 0.019; initial visits per year, 10.0, standard deviation = 2.51; final visits per year = 5.6, standard deviation = 3.8). The frequency of visits for patients without mental health diagnoses did not change.
Conclusion: Intervening with frequent attenders of primary care who have mental health conditions improved their symptoms and reduced their health care utilization, with beneficial impact on practitioners and improvement in the morale of the staff.

INTRODUCTION

Patients who frequently visit their general practitioner (GP) often have multiple comorbidities and are costly in primary and specialist health care. More than one-third of Australians (35.3%) went to a GP 6 or more times in 2012 to 2013. Those who went most often tended to be older and less wealthy, were more likely to have several long-term health conditions, and were more likely to see several different GPs (as was the case in our practice in the UK). One in 8 Australians (12.5%) saw a GP at least 12 times in 2012 to 2013, accounting for 41% of the $16 billion Medicare Australia paid in out-of-hospital benefits. Patients with a large number of visits to the GP, called very high attenders (20 or more visits per year), were almost twice as likely as low attenders (1-3 visits per year) to have lived in areas of low socioeconomic status (29% vs 16%).

Psychological interventions can reduce frequent attendance. Fewer patients contacted their GPs specifically for psychological or social problems (46.3% vs 38.8%) and fewer patients had anxiolytic medication (15.5% vs 7.6%) after psychological treatment. People with mental health issues make more use of general practice services and use more medication, even after controlling for physical health status. Bellón et al provided an interactive, 15-hour workshop training session on a psychological team intervention with GPs in southern Spain. Of the 137 frequent attenders registered with 3 GPs randomly allocated to perform the intervention, 66 frequent attenders were randomly allocated to receive the intervention and 71 to a usual care control group. A multilevel model was built with 3 factors: Time, patient, and GP. After adjusting for covariates, the new intervention resulted in a significant and relevant reduction in frequent-attender consultations.

In a 2-year prospective study of 623 adult frequent attenders in 2009 in the Netherlands, panic disorder, other anxiety, negative life events, illness behavior, and lack of a sense that they could change their lives were independently associated with persistence of frequent attendance. The authors found no evidence for synergistic effects of somatic, psychological, and social problems and no evidence for any effects of GP characteristics. Also in the Netherlands, among 503 patients listed in 1 of 150 participating GP practices in 2008 to 2010, people who had psychological treatment during 2009 significantly dropped their frequency of medical contacts afterward (6.1 to 4.8). They contacted their GPs less for psychological or social problems (46.3% vs 38.8%) and had fewer anxiolytic drug prescriptions (15.5% vs 7.6%) after psychological treatment. Although contact rates decreased, these clients of psychologists were still frequent GP attenders.

This article describes a process of addressing the related problems of patient overattendance in primary care and physician burnout in a general practice in Cumbria, UK.

METHODS

Setting

The practice serves 5500 patients in a market town in Cumbria, UK, with 3 full-time equivalent GPs (5 people) and 2 full-time practice nurses. In 2007, the practice was at a breaking point—up to 6 extra appointments added onto the end of every half-day. The staff experienced burnout, partly from the impact of the many
frequently attending patients. Staff members were tired and grumpy, and several GPs were using sick days sufficiently often to necessitate the use of locum tenens. A decision was made to implement an internal process using a talking circle format to explore the causes of this burnout.

Process
The talking circles—a group communication technique in which only one person is allowed to talk at a time—aimed to identify the source of practitioner burnout and to identify simple strategies to improve it. The group concluded that reducing the visits of its frequent users of services (frequent attendees) could improve the quality of life of the practitioners.

An audit identified 163 patients as frequently attending the practice. All 5 GPs in the practice were intrigued that each of them knew a little about most of the patients. These patients had seen each GP several times. Each consultation appeared appropriate. The notes were detailed well. The GPs noted, however, that most of the patients had symptoms that “didn’t amount to much” because they were not explained by disease. The GPs decided not to call the patients specifically, but to deal with them as they came for visits. An effort would be made to ensure that patients sought help from their usual GP. Unlike reports in the literature showing that frequent attenders returned to baseline rates over time, a core group of patients in this practice were stable in their being frequent attenders over the years (at least 5 years). The results of this intervention were compared with those of 3 other practices in the same region for the same period.

Intervention
As part of the talking circle process, the GPs assessed the skills they had for intervention and planned accordingly. They settled on a maximum of six 20- to 30-minute individual sessions. If more care was needed, a referral was made to the Primary Care Mental Health team. The first visit was designed to establish the important relationships in the person’s life using the genogram, a common tool in primary care, which graphically represents a patient’s family relationships and medical history. The second session consisted of psychoeducation about the effect of interpersonal conflict and life stress on bodily symptoms, designed to provide the rationale for the remainder of the interventions. The remaining interventions consisted of problem-solving sessions in the major areas of the patient’s life problems, in the style of solutions-focused therapy (for which manuals exist). This intervention was strongly influenced by the work of Alasdair Macdonald and his outline for conducting therapy. As is the practice in solutions-focused psychotherapy, after the identification of the most stressful relationships using the genogram in the first session and the explanation in the second session for how the stress from these relationships was contributing to the patient’s physical symptoms and number of medical visits, the patient and the physician selected the most problematic relationship on which to focus for the next 4 sessions. Most patients, however, needed only 2 or 3 sessions. Included among the problem-solving techniques were some of the solution-focused questions, the 7/11 breathing exercise (inhalation to the count of 7 and extending exhalation to the count of 11), and the explanation of the stress cycle.

The intervention was implemented in January 2009 and was studied over 4 years, although the intervention continued. Each year for 4 years, the 50 most frequent attenders were invited to participate in the intervention. We attempted to keep patients seeing the same GP. We gathered data on overattendance for 4 years after the close of the study. No patient received the intervention twice.

We provided community trainings for other practices that became involved as a result of discussions in the community. The other practices did their own frequent-attender audits. Their communities were equivalent sociodemographically with ours.

Statistical Analysis
Our primary outcome measure was the number of visits per year. We used multi-level modeling methods (Mixed-Effects Models procedure of SPSS, Statistical Package for the Social Sciences Version 22, IBM Corp, Armonk, NY). We had comparison data from 3 other practices in the region and used a coding variable for each practice. We coded each of the major diagnoses listed in Table 1, as well as whether the patient was on any of the existing chronic disease registries, whether s/he was receiving antidepressants, and the patient’s age and sex. The dependent variable was the number of visits per year. Time of observation was nested under diagnosis, which was nested under practice. A number of potential interactions were also explored.

Qualitative Data Analysis
In keeping with case study methods, we attempted to instantiate and develop the themes that emerged from meetings with the frequent attenders. We did this to understand what drove them to come so often to the practice and to further assist some of them to meet their needs in such a way that they could consult the GP less frequently. This inductive process, as defined by Charmaz, relies on the “study of a range of individual cases and extrapolates patterns from them to form a conceptual category,” which then leads to a solutions-focused intervention.

The clinical approach used is consistent with the goal for the GP to avoid dominating the interview, as has been recommended for qualitative researchers. Our goal was to understand the patient’s life and context in which the frequent visits were occurring and to understand what the patient hoped to accomplish by coming to the GP. The aim was to elicit all the problems and all the symptoms to make sense of their presentation.

The discussions of these frequent attenders by all the GPs and nurses in the practice provided the function of triangulation described by Creswell. Solutions-focused therapy is based on the idea of checking all inferences with the patient for verification, which is similar to what has been called member checking in qualitative research. Solutions-focused therapy uses an approach that resembles the constant comparison method of qualitative data analysis. This method of analyzing data returns frequently to the participants for clarification and further explication on a topic.
RESULTS

During the course of 4 years, 356 individuals were found to be frequently attending patients. Table 1 presents the diagnoses active at the time of visit for these 356 patients and shows which diagnoses are statistically significantly more common among the frequent attenders. The frequent attenders had an average of 5 active diagnoses each visit, whereas a group of randomly selected patients had 2.86 active diagnoses at the time of each visit. The mean age of frequently attending patients was 53.27 years with a standard deviation of 24.30 years. The practice decided to intervene with the top 50 attenders each year, a number determined by physician time availability.

During the first year, 2 of the top 50 patients were seriously ill, and both died shortly after the audit period. The top 5 attenders were all people with serious mental illness. Seven of the 50 had straightforward physical health problems, which were being managed through lifestyle and medication. Twenty-six of the 50 had a variety of medically unexplained symptoms, dyspepsia being the most common.

The percentages for specific diagnoses did not differ among practices. Nor was the age distribution or sex ratios different among the four practices. Age and sex ratios did not change significantly from year to year.

Statistical Analysis

The interventions enacted reached statistical significance for patients with a mental health diagnosis (41.0% of the frequent attenders). For them, the changes enacted in the practice reduced the rate at which patients consulted physicians over time (p = 0.019). A total of 186 patients received the intervention over 4 years. Time was nested under condition. The estimate of the slope was 0.3878 with standard error of 0.1532, t value of 2.974, and 95% confidence interval from 0.0358 to 0.9199. The -2 restricted log likelihood was 794.310. No significance was found for the patients who did not have a mental health diagnosis. The number of chronic diseases, age, or specific illnesses for which there were registries was not significant. Illnesses considered included chronic obstructive pulmonary disease (COPD), congestive heart failure, coronary artery disease, diabetes, atrial fibrillation, obesity, thyroid disorder, hypertension, cerebrovascular accident, chronic kidney disease, asthma, cancer, dementia, and terminal illness resulting in palliative care. The data from 3 other practices were analyzed for this same period, and no statistically significant changes occurred in the number of visits in any of the 3 practices during the same time period. The prevalence of mental health diagnoses did not change; rather, the rate of utilization changed after the intervention.

| Table 1. Number of visits associated with specific diagnoses among frequent attenders and randomly selected attenders |
|---------------------------------|---------------------------------|-----------------|-----------------|
| Diagnosis                       | Diagnoses of frequent attenders, N = 356, no. (%) | Diagnoses of random attenders, N = 356, no. (%) | χ²   | p value |
| Pain (except back and head)     | 332 (93.2)                                   | 142 (39.9)                               | 227.8 | < 0.00001 |
| Back pain                       | 87 (24.4)                                    | 31 (8.7)                                 | 30.5  | < 0.00001 |
| Asthma and breathing complaint  | 123 (34.6)                                   | 92 (25.8)                                | NA    | NS       |
| CHF                             | 95 (26.7)                                    | 30 (8.4)                                 | 41.0  | < 0.00001 |
| GI complaint (GERD, dyspepsia, etc) | 113 (31.7)                                | 55 (15.4)                                | 28.2  | < 0.00001 |
| Headache                        | 148 (41.6)                                   | 74 (20.8)                                | 35.2  | < 0.00001 |
| Hypertension                    | 122 (34.2)                                   | 71 (19.9)                                | 18.5  | 0.000017 |
| Anxiety                         | 72 (20.2)                                    | 69 (19.4)                                | NS    | NS       |
| Depression                      | 67 (18.8)                                    | 31 (8.7)                                 | 15.3  | 0.00009 |
| Other psychiatric diagnosis     | 109 (30.6)                                   | 59 (16.6)                                | 19.5  | 0.00001 |
| COPD-related                    | 63 (17.7)                                    | 36 (10.1)                                | 8.5   | 0.003     |
| Acute infection                 | 57 (16.0)                                    | 56 (15.7)                                | NS    | NS       |
| CAD                             | 54 (15.2)                                    | 26 (7.3)                                 | 11.0  | 0.0009    |
| Diabetes                        | 54 (15.2)                                    | 17 (4.8)                                 | 21.4  | < 0.00001 |
| Cognitive disorder              | 51 (14.3)                                    | 40 (11.2)                                | NS    | NS       |
| CV/A/TIA                        | 36 (10.1)                                    | 37 (10.4)                                | NS    | NS       |
| Chronic kidney disease          | 36 (10.1)                                    | 28 (7.8)                                 | NS    | NS       |
| Gynecomastia                    | 42 (11.8)                                    | 43 (12.1)                                | NS    | NS       |
| Diabetes complications          | 53 (14.9)                                    | 37 (10.4)                                | NS    | NS       |
| Cancer-related                  | 37 (10.4)                                    | 34 (9.6)                                 | NS    | NS       |
| Obesity                         | 33 (9.3)                                     | 13 (3.7)                                 | 9.3   | 0.002     |
| Active diagnoses per visit      | 5.0                                          | 2.9                                      | NA    | < 0.0001  |

CAD = coronary artery disease; CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease; CV/A/TIA = cerebrovascular accident/transient ischemic attack; GERD = gastroesophageal reflux disease; GI = gastrointestinal; NA = not available; NS = not significant.

Practice Changes

Table 2 presents the major themes that arose during interventions. Arising from conversations with frequent attenders during the interventions and from the talking circles conducted with the medical team, a number of changes were implemented in the practice. These changes parallel the major themes that emerged:

- Stress is a major contributor to frequent use along with health-related anxiety; the staff was given training on stress management.
- Anxiety and health-related anxiety were identified as major drivers of patients' frequent use, so staff received training in recognizing and treating anxiety.
- Frequent attenders had negative views of their mental health; positive psychology21 can mitigate this to some degree, and staff received training in these areas.
- Patients reported more abuse and domestic violence than was anticipated. Personality disorders were underappreciated. Therefore, all staff received training on personality disorders and on recognizing abuse and domestic violence.
• Frequent attenders were anxious about getting time with the GP and being able to get an appointment to see the GP. They reported that the 15-minute appointment was too short, and they believed that the could not discuss everything they needed addressed. Changes were made for the GP to specify when the patient should return and for how much time. Patients were given their next appointment when they left the office.

Independent of the patients, the medical team decided to delegate more work, including, for example, medical assistants taking vital signs instead of the GPs doing so. All these activities resulted in less use of locum tenens by the practice.

As the GPs reviewed the interviews with the frequent-attender population, they observed gaps in services or poorly functioning services that were not meeting patients' needs. During the first year of the program, this resulted in:

• more regular meetings of the GPs with the health visitor and school nurse
• better communication with the Primary Care Mental Health team
• the realization that thinking about patients' actual needs is fun and interesting, and the formation of a commitment to continue to do so
• the realization that thinking about patients in the context of their family and life situations worked better than thinking about patients as individuals
• the realization that thinking about the mental well-being of the practice itself was helpful.

As a result of hearing about the intervention and the effects it had on the practice, nine other practices in the region began doing frequent-attender audits and were similarly pleasantly surprised. A consultation skills training group began returning calls to every patient who had called to make an appointment, to determine what was needed. Advice could be given and laboratory studies scheduled in advance, and often, a visit could be avoided.

Table 2. Major themes identified among patients who received interventions

<table>
<thead>
<tr>
<th>Theme category</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>General anxiety</td>
<td>166</td>
</tr>
<tr>
<td>Family stress</td>
<td>76</td>
</tr>
<tr>
<td>Work stress</td>
<td>74</td>
</tr>
<tr>
<td>Health-related anxiety</td>
<td>66</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>65</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>62</td>
</tr>
<tr>
<td>Relationship stress</td>
<td>62</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>61</td>
</tr>
<tr>
<td>Negative self-evaluation</td>
<td>28</td>
</tr>
<tr>
<td>Nondomestic physical abuse</td>
<td>26</td>
</tr>
<tr>
<td>Institutional stress</td>
<td>21</td>
</tr>
<tr>
<td>Lack of self-agency</td>
<td>16</td>
</tr>
</tbody>
</table>

Case Studies

The following case studies of frequent attenders provide some of the richness of the qualitative data that led to the aforementioned actions. All the patients whose cases are presented carried a mental health diagnosis of anxiety. All patient names have been changed.

Case Study 1: Dyspepsia

Margaret was 60 years old. She presented to the practice with dyspepsia, shortness of breath, hypertension, abdominal pain, neck pain, back pain, and headaches. She was on the obesity and hypertension registries. She had also consulted a mental health specialist for stress and related a few family worries but never went into extensive detail.

Margaret sat down heavily in the chair and sighed. After dealing with her immediate agenda, the primary author VY commented to her that she had been in to see the GPs with many different problems during the last six months. VY wondered if it might be a good idea to take a step back and try to make sense of it all. Because she didn't know Margaret and was interested in families, VY said it might be helpful to map out the members of her family. Margaret readily agreed and sat a bit straighter in her chair. They filled in a genogram. Margaret's first utterance after commencing the genogram was that, ten years earlier, her husband had announced that the marriage was over and that he had found someone else. He left the same evening. She looked visibly shocked as she described this event, which had left her with four teenage children. Her eldest son had just resumed living with her accompanied by his six-year-old son, whom she described as "a handful." The boy's mother had drug problems and couldn’t care for him and neither could his other grandmother. Margaret’s house didn't have enough bedrooms.

She said her other three children gave her an “average amount of grief” and weren't very helpful to her. She felt less stressed now that she was retired and had her pension. She described her siblings: A brother with palsy who lived in a residential home and a sister with a diagnosis of multiple sclerosis, whose two daughters were child care workers and whose husband was very busy at work. She then mentioned her frail, elderly mother. Her father had died ten years previously at the time her marriage broke up, a double grief.

As Margaret looked at what she had drawn, she reflected that there didn't appear to be much time for her. She said she had talked about most of her problems except for the divorce with her GPs, but had never put all the problems together. She thought this was very important but wondered how it linked to her symptoms. As the scheduled visit had run out of time, Margaret and VY agreed to meet again the next week to talk about how stress gets into the body. VY informed Margaret that she thought another four or five appointments would be necessary to sort out her problems.

Margaret looked puzzled but grateful at hearing this and went out to make the appointment with an appointment slip, which would get her past the screening of the receptionists.

The next week VY and Margaret reviewed the stress cycle, which VY drew, listing Margaret’s problems at the top of the paper and writing adrenaline beneath them. Margaret knew that adrenaline was the fight or flight hormone. VY explained the effects of adrenaline on the...
body: Sweating, palpitations, increased breathing rate, and stimulation of the brain (arousal, hypervigilance, and alertness). Overbreathing lowers carbon dioxide, which increases muscle tension. This could happen in any muscle but is especially noticeable in the small muscles controlling the intestines, the esophagus, the bronchi, and the bladder. Spasm in any of these areas could cause neck pain, back pain, irritable bowel, indigestion, and irritable bladder.

Margaret mentioned a few of these symptoms that she hadn’t reported yet, including palpitations and difficulty swallowing. Margaret reflected aloud, “It all fits together. Each time I get a new pain, I have been convinced that I have cancer.”

VY then taught Margaret how to do 7/11 breathing, and she started to relax. The second appointment finished with a relaxation process called the 5-finger exercise. Margaret commented at the end of the appointment that she had never before felt relaxed and, now that she knew what it was, she was not going to let it go.

During the next four appointments, VY used a solution-focused style to help Margaret problem-solve about her domestic situation and the need to create boundaries for herself in her own home. She agreed to a referral to a local caregivers’ organization (whose staff carried on with the relaxation theme). The staff there organized more focused help for her sister. She read a self-help book called Women Who Love Too Much by Robin Norwood. At her last appointment she said, “Do you know, I don’t think I need any more appointments. I think I’ve got it and can do it on my own.” She has not been a frequent attender since that time, despite hip surgery and deep venous thrombosis.

**Case Study 2:**

**Chronic Obstructive Pulmonary Disease**

Beryl was a 52-year-old woman with COPD. She had come to an educational event about COPD with 50 other patients, during which she had learned about the mental health aspects of having COPD and that breathing better could help her. She was married, with 2 adult children who had recently left home for work. She had had 2 “episodes of bronchitis” the previous winter, which had frightened her, leading her to think that her breathing was becoming terribly bad. She was scared for the future and believed her life was coming to an end. She had stopped doing what she had previously enjoyed: Dancing and seeing her girlfriends. She didn’t work outside the home. She came from a family in which women didn’t speak up for themselves; they just accepted their lot.

Her first genogram appointment lasted 20 minutes. Beryl’s breathing was not too bad; she had mild to moderate COPD. She readily accepted that her anxiety was interfering with her COPD. Her hopelessness was clouding her judgment, as was her guilt at having caused her illness by smoking. On examination, her shoulders were high and she was breathing with the upper part of her chest. Her respiratory rate was 16 breaths/min, and her oxygen saturation was 96% on room air. She couldn’t manage abdominal breathing while sitting, so she lay on the examination table. Gradually she unlearned her paradoxical abdominal movements, which were restricting her breathing. Then with each breath she learned to extend exhalation to the count of 11 and inhale to the count of 7, and then to let her shoulders fall with each breath out. Then she learned to breathe in so that her lower ribs expanded outward and her posterior ribs also moved. Her respiratory rate dropped to 12 breaths/min, and her oxygen saturation rose to 98%.

Beryl sat up and said how very different she felt—calm and purposeful. She agreed to practice the 7/11 breathing several times a day at home, and not just when she felt stressed. She decided on an appointment in 2 weeks for follow-up. Physiologically she was much better and somewhat surprised. This breathing training appointment lasted 20 minutes.

At the third appointment, solution-focused questioning revealed that she had stopped dancing and socializing. She had also stopped talking with her husband about how she felt. One of the initial solution-focused questions is to ask, “What have you been doing differently since the last appointment?” She had already started talking with her husband since filling in the genogram. She had realized that they both needed to get their lives back on track now they had an empty nest. They were planning a long vacation—their first without children. She was at 6 on a subjective scale of 0 to 10, with 0 indicating the worst and 10 the best. She said she had been at 2 when she first started attending the intervention sessions. Moving up the scale would happen if she planned going dancing with some girlfriends. She decided she wanted to come back in a month. She commented that she hadn’t felt the need to use additional albuterol since she learned to breathe properly. This appointment had lasted 10 minutes.

Beryl returned 1 month later saying, “I don’t know why I’m here, [because] I’m fine; 9 out of 10. You shouldn’t come to the doctor’s if you are well!” VY commented that it was encouraging to the GPs’ morale to see patients improving.

Beryl said she had gotten her life back and was extremely grateful that it had been so easy. VY then asked a mischievous question with her consent. “I’m not suggesting at all that you would do this, but supposing a part of you decided to make yourself unwell again, what three things would you do to be sure that you would get worse?” She was clear that she would start breathing from the top of her chest and deliberately breathe faster. She would stop going out socially and she would stop talking with her husband.

“Why do you think I asked that mischievous question?” VY asked.

After a pause she reflected, “Now I know the most important things to watch out for, so I can step in early, [because] I never want to go back like that.”

**Case Study 3:**

**Previous Chest Surgery**

A practice nurse referred a 14-year-old to learn breathing exercises. The patient had asthma and had been complaining she was becoming more and more breathless. The nurse was puzzled by her case and didn’t want to escalate her treatment needlessly. This girl had had a thoracotomy to remove a large but benign lung cyst when she was 8 years old. She came with her father to the appointment.

On examination, the adolescent was breathing with her upper chest and her shoulders were high. There was no audible wheeze, and her peak expiratory flow rate...
was 350 L/min. On examination of her chest wall, she had a near thoracotomy scar. A large area around this scar was not moving. VY explained that she thought her body was still remembering the operation and could stop holding that memory. Her chest wall could move without any problem.

They went through an exercise of 7/11 breathing, with which she struggled initially until it was reduced to 3/5 breathing. She practiced breathing into her scar area and was able to expand it surprisingly easily, pushing VY’s hand away with the chest wall, so there weren’t any contrac-
tures. She and her father were given a handout on breathing properly. This constituted a 20-minute appointment for breathing training.

She returned a week later saying, “I’m fine; can I leave now?” This was a 5-minute consultation. Her father reported several months later that she had reduced all her asthma medication, and he and the nurse were querying whether she was asthmatic at all! They thought the source of her breathing problem was a faulty breathing technique.

**Case Study 4: Severe Chronic Obstructive Pulmonary Disease**

Doris was in her late 60s. She had bullous emphysema after years of heavy smoking. She was worried that she was going to be put on oxygen therapy and that would restrict her social life. She was a lively soul. She had had several scary episodes of “pneumonia” in the previous 6 months.

On examination, her shoulders were high and her respiratory rate was 20 breaths/min. Her oxygen saturation level was 92% on room air. After she learned 7/11 breathing, her respiratory rate dropped to 12 breaths/min and her oxygen saturation rose to 96%. In addition, she learned to add a second hold after inhalation. She was amazed with the improvement in how slowly she breathed and how calmer she felt. She wanted to understand how this miracle had happened, so VY explained how her rapid breathing wasn’t allowing oxygen the time it needed to cross the alveolar membrane but that carbon dioxide, which diffuses faster, was getting blown off. This had the effect on her blood cells of not letting them release the oxygen, and it also caused her chest wall muscles to become more tense and reactive. This tension made her feel like she needed to take more breaths.

In discussion, we learned that Doris had the mistaken belief that because her lungs were damaged, she had to take as many breaths as possible. She was very interested in the fact that if she could manage her breathing well, infections would be less likely because she would be clearing her airways properly. She found it difficult to maintain 7/11 breathing on her own, so she was referred to a respiratory physiotherapist for more intensive work. He reinforced the abdominal breathing. He taught her how to cough effectively and taught her husband how to percuss her chest to aid in sputum clearance. A trial of carbocysteine also helped. She became more motivated to start early antibiotic therapy when she knew a “chest” infection was starting. She was grateful for the deeper understanding of her lung physiology and the better sense of control this gave her.

**DISCUSSION**

An intervention arising as a result of an audit process reduced frequent attend-
dance in a primary care general practice in Cumbria, UK, among patients who had a mental health diagnosis. Monitoring the intervention led to changes in the practice that improved the quality of life for its practitioners. These changes were made by the physicians themselves using tools accessible to general practitioners and usable in the general practice setting. Other practices in the region became inspired by what had happened and implemented similar activities.

For understanding frequent attendance, the severity of the patient’s distress was more important than how minor the GP felt the illness was. Knowing patients’ backgrounds (stories) improved care by providing a context for the GP to place the patient’s distress. Simple skills can have large impact, including teaching breathing practices to reduce hyperventilation, the 7/11 breathing technique, and the 5-finger exercise. Genograms are useful to open the dialogue about family relationships.

**Strengths and Limitations**

This study may be limited in its potential generalizability. It arose from an audit process in one general practice in rural northern England. Practices and patients differ around the world, and the brief intervention employed here might not work elsewhere. The strength of the study is its demonstration that general practices can transform adverse circumstances through an audit process, can implement an intervention on the basis of the results of that audit, can monitor the results of that intervention, and can thereby improve the quality of the physicians’ experience as well as the patients’.

The case studies showed the importance of physicians being able to carry out these interventions. Although behavioral therapists can help greatly in encouraging healthful change, the GP’s knowledge of medicine and having a long-term relationship seemed important for most patients in this practice, at least for accomplishing change in 6 visits of 20 to 30 minutes’ duration.

**Comparisons with Existing Literature**

A meta-analytical review showed that 90% of the 91 studies analyzed reported a decrease in medical utilization after psychological intervention.4 The most dramatic effects were seen in patients with more severe forms of psychological and physical symptoms. It seems reasonable to expect that psychological interventions in primary care will decrease mental health problems, resulting in overall decreases in medical care utilization.42 Our report shows that psychological interventions can be done by the general practitioner within the timeframe typically allowed for encounters in the primary care setting and with short treatment periods.

**CONCLUSION**

Further work is indicated to understand how to optimally deliver medical care to people with multiple physical complaints who visit the GP often. This report shows that psychological intervention among frequent attenders decreases their use of primary care, improves GP and staff morale, and is possible in a rural general practice setting. Further work is also needed on how practices
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can self-audit and use those processes to change their process of care and solve problems. 

Disclosure Statement
The author(s) have no conflicts of interest to disclose.

Acknowledgment
Kathleen Louden, ELS, of Louden Health Communications provided editorial assistance.

Author Contributions
Venetia Young, MD, was a member of the practice and performed the bulk of the interventions. Barbara Mainguy, MA, and Lewis Meh-Madrona, MD, PhD, consulted to the practice and provided training to the staff on narrative practices, talking circles, narrative medicine, and brief interventions. Lewis Meh-Madrona, MD, PhD, conducted the statistical analyses. The remainder of the interventions and the changes in the practice were implemented by the staff of the practice.

How to Cite this Article

References

The Secret
Remember to breathe. It is, after all, the secret of life.

― Gregory Maguire, b 1955, American novelist