

BY JUDITH ASCH-GOODKIN

Quality care vs. bottom line?

Can a low-key, low-tech pediatric practice stay humane and solvent in an era of rising health care costs and intense pressure to improve the bottom line? A day-long visit to *CP* contest winner Just So Pediatrics in Brattleboro, Vt. illuminates the issues but provides no definitive answers.



Dr. Jane Katz Field,
in her office at Just So
Pediatrics.

Pediatrics is a medical specialty devoted to the care of children in its many ramifications: health supervision, prevention of disease, treatment of acute illness, advocacy for children's welfare. But the practice of pediatrics is also a business enterprise that must be solvent, able to pay its bills, and yield a reasonably comfortable standard of living for its practitioners. This article is a case study that explores whether those two imperatives—conscientious care of children, and solvency—are compatible, or can be made so.

Contemporary Pediatrics runs a contest

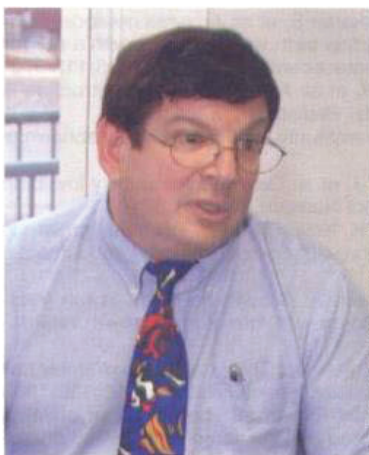
The story begins with a contest run by *Contemporary Pediatrics* that asked readers to fill out an electronic entry form and answer a question based on a recent *CP* article. The winners were drawn at random from a pool of correct answers. The winner was Dr. Jane Katz Field, whose pediatric practice is located in Brattleboro, Vt.

Dr. Katz Field is a graduate of the

University of Medicine and Dentistry of New Jersey. She is adjunct assistant professor of pediatrics at Dartmouth Medical School and a clinical instructor at the University of Vermont College of Medicine. She did half of her pediatric residency at Cooper University Hospital in Camden, N.J., and the other half at UMDNJ, Newark Campus; is the mother of four sons, ranging in age from 18 to 31; and a transplant from what native Vermonters refer to as "away," drawn to Vermont for its mountainous landscape and distinctive life style.

Her prize was a day with Andrew J. Schuman, MD, who is adjunct assistant professor of pediatrics at Dartmouth Medical School and *Contemporary Pediatrics'* contributing editor and in-house maven on matters of computer-savvy, high-tech pediatric practice. When he is not writing *Contemporary Pediatrics* articles, Dr. Schuman is in private practice in Manchester, N.H.

Continued on page 79



Dr. Andy Schuman in
the Just So Pediatrics
waiting room, talking over
his impressions
of the practice.

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Just So Pediatrics

The practice takes its name from a favorite children's book, one-time Brattleboro resident Rudyard Kipling's *Just So Stories*. It is located in what was once a private home, now converted to accommodate (in a somewhat cramped fashion) the basics of a pediatric office. A waiting room with toys for kids and chairs for parents was once the living room of the house; the front desk is where appointments are made, telephones answered, and superbills made out to send to the practice's billing service. Dr. Katz Field does her paperwork and phone calls from a small, crowded private office. A hallway leads to Just So's four examining rooms. The hallway is long enough to do double duty as a venue for testing children's visual acuity; the scale is out there, too. Two photo collages of the practice's patients decorate one wall.

The house is located on a tree-lined street in Brattleboro, Vt., a town of some 12,000 inhabitants and a rather colorful, art- and music-conscious, politically progressive tradition. Brattleboro nestles in the valley of the Connecticut River in southern Vermont, encircled by a network of hills and mountains. It is definitely not what Vermonters call a "gold town," which is local parlance for a town populated by well-to-do skiers in expensive second homes. On the contrary, Brattleboro is a place where the median family income is \$45,000, and 9% of family incomes are below the federal poverty line. Dr. Katz Field's impression is that median income for the families she sees is lower than these census figures.

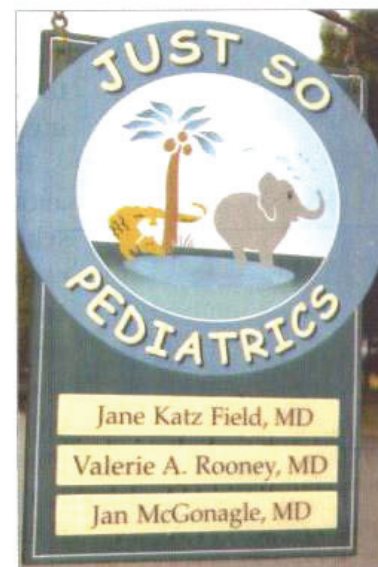
About half the practice's patients are on Medicaid or Dr. Dynasaur, Vermont's unusually inclusive version of the State Children's Health Insurance Program (SCHIP). Unfortunately, physician reimbursement under the Dr. Dynasaur program has until now been substantially lower than the Medicare rate—a circumstance with unfortunate effects on the finances of pediatric practices like Just So.

That situation will start to improve when new state regulations go into effect this year. Dr. Katz Field's associate, Valerie Rooney, MD, was one of the tireless physician-advocates whose pressure moved the state legislature to take this action.

Right across the street from Just So is the Brattleboro Memorial Hospital, owned—as is Just So Pediatrics—by the Southern Vermont Health Services Corporation (SVHSC), a private, non-profit corporation. Dr. Katz Field spends a good deal of her time at Brattleboro Memorial, attending cesarean sections, providing pediatric coverage in the emergency department, helping with trauma patients from accidents on the nearby interstate, and stabilizing newborns whose condition is precarious, until the helicopter arrives to whisk them away to the NICU at Dartmouth-Hitchcock Medical Center in Hanover, N.H. Pediatric specialists are scarce in this rural area. Patients who need specialist care are also referred to Dartmouth-Hitchcock, a burdensome hour-and-a-half drive away.

Dr. Katz Field and Dr. Rooney work 3/4 time at Just So; a third pediatrician works a few hours a week. All three physicians are salaried employees of SVHSC, as are the members of the practice's staff: two LPNs, a receptionist, and a medical assistant trained in house. Doctors and clinical staff all work overlapping shifts. The doctors telephone each other, connect through the nurses, and hold monthly staff meetings where their current push is for adequate documentation in the chart.

Just So's office is open five days a week, plus one evening session a month. Daily nursery rounds at the hospital lengthen the doctors' day. There are no regular Saturday hours. The practice has about 1,500 active patients. On a typical office day, Just So schedules about 20 patient visits: 6 to 8 well-



A signboard, picturing Kipling's elephant's child and the alligator that lengthened his nose, identifies the office.

child visits (30 minutes for babies and young children, 45 minutes for teens), plus 12 sick visits that average 15 minutes each. Medical students from Dartmouth do month-long rotations at Just So, learning to do histories and physicals on children and interact with parents. Supervising these students is time consuming, but the Just So pediatricians believe they are obligated to do their part in educating the next generation of physicians.

The Just So pediatricians share call with another pediatric practice in town, on a schedule that works out to one night in six for each physician. On-call weekends are busy enough that Dr. Katz Field finds it easiest to simply spend the whole day in her office, ready for whatever arises; she will also see a patient at night, if necessary. The after-hours phone is busy, too; on a recent evening, Dr. Katz Field got seven calls. The doctors do their best to educate parents about what necessitates an evening phone call and what can wait until morning, but anxious parents still feel the need for at-the-moment reassurance. And they get it.

The practice includes a goodly share of time-consuming patients: families struggling with

poverty, violence, and alcoholism; children with complex developmental and behavioral difficulties; parents suspicious of the medical establishment who need considerable discussion before they will accept immunizations for their children. About 5% to 7% of the patients have been diagnosed with attention deficit hyperactivity disorder: most are seen every three months to monitor their progress and supervise their medication. Children with depression and anxiety disorders are managed within the practice. Those who require anti-psychotic medications are referred to a psychiatrist or to a psychiatric nurse practitioner at the Brattleboro Retreat, a local psychiatric facility, but followed at Just So. The pediatricians are experimenting with having a psychologist see some patients in the office, a few hours a week.

What makes a 'shiny, happy' pediatric practice?

Dr. Schuman has a checklist for what he calls a "shiny, happy pediatric practice" (see Table), and Just So gets good grades on many of its key elements.

The quality of care these doctors provide is

Table

8 key elements for a shiny, happy pediatric practice

1. Quality pediatric care, with an emphasis on patient education
2. High level of contentment: for patients, pediatricians, and staff
3. Physical plant: attractive, safe, conducive to efficient workflow
4. Effective communication
5. Compliance with OSHA, HIPAA, and other applicable mandates
6. Appropriate, up-to-date technology: EMR, testing instruments
7. Efficient business model: appropriate billing and claims management, good collection rate, productivity incentives, growing practice
8. Willingness to improve

certainly at a very high level: caring, empathic, medically sophisticated. The practice has been commended for early involvement with Vermont's Immunization Registry, and will make use of the reminder and recall notices the Registry will generate. Just So participates in the Reach Out and Read program; the office bookcase is filled with copies of the books they give out to children.

Educating families about good nutrition is a priority, and in keeping with that philosophy, lollipop rewards that some practices hand out are a no-no at Just So. Sick patients and worried parents have immediate access

to care. Health supervision practices are consistent with the American Academy of Pediatrics (AAP) guidelines. There are no economic barriers to care. Specialist referrals are diligently pursued. Just So's commitment to continuous quality improvement is demonstrated by participation in the Vermont Children's Health Improvement Project, an offshoot of the National Initiative for Children's Healthcare Quality.

Just So's physical plant is cramped and the physicians' offices are not comfortable, but staff surmounts these hurdles with considerable efficiency. Patient records are still handwritten (or typed). These physicians do not feel that adoption of an electronic medical record (EMR), high on Dr. Schuman's list of desirable innovations, is a top priority for them at this time. The practice might get a higher grade on "risk management" if it protected itself by refusing to accept "difficult" parents, but Just So doesn't do that. These physicians are practicing pediatrics as they feel it should be practiced, working long hours but not feeling pushed to see more patients in a day than they can conscientiously care for.

They would like to have higher salaries and a more spacious work place, but basically, they

are content. Practice finances are regularly reviewed at meetings with the hospital corporation, and the physicians are made aware of the need to hold costs down, collect copays, keep an eye on collections, and make the most efficient use of their time. So what's the problem? Or is there one?

Boosting the bottom line

The problem is the bottom line. Like most hospital-owned practices, Just So loses money. Collections do not cover the costs of staff compensation and office overhead. Dr. Schuman has a number of concrete suggestions for overcoming this problem, some of them applicable to the physicians and others the province of the hospital corporation that owns the practice.

For the physicians, he advocates such measures as follow-up appointments for children seen for uncomplicated acute otitis media. He would like to see the practice use more high-tech equipment like the oto-acoustic emissions hearing screeners that make reimbursable procedures possible. He thinks the doctors should spend less time per visit, delegate more of the health supervision and preventive medicine chores to staff members, refer out time-consuming psychosocial problems, and see more patients with private insurance and fewer with Medicaid.

Most of these suggestions met with resistance. In the pediatricians' view, such measures are not compatible with their idea of how pediatrics should be practiced, nor would they suit the needs of the families they serve. "My life would be meaningless if I were unable to do what I believe is important for my patients," says Dr. Katz Field, "and I couldn't do those things if I saw more patients or shortened the time I spend with each one."

Her colleague Dr. Rooney chimes in. "I'm willing to take a lower salary to do what I believe is right."

And from the corporation's perspective,

Point Taken

The problem is the bottom line. Collections do not cover the costs of staff compensation and office overhead.

(moxifloxacin hydrochloride ophthalmic solution) 0.5% as base

DESCRIPTION: VIGAMOX® (moxifloxacin HCl ophthalmic solution) 0.5% is a sterile ophthalmic solution. It is an 8-methoxy fluoroquinolone anti-infective for topical ophthalmic use.

Clinical Studies: In two randomized, double-masked, multicenter, controlled clinical trials in which patients were dosed 3 times a day for 4 days, VIGAMOX® solution produced clinical cures on day 5-6 in 66% to 69% of patients treated for bacterial conjunctivitis. Microbiological success rates for the eradication of the baseline pathogens ranged from 84% to 94%. Please note that microbiologic eradication does not always correlate with clinical outcome in anti-infective trials.

INDICATIONS AND USAGE: VIGAMOX® solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible strains of the following organisms:

Aerobic Gram-positive microorganisms:

*Corynebacterium species**, *Micrococcus luteus**, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Staphylococcus haemolyticus*, *Staphylococcus hominis*, *Staphylococcus warneri**, *Streptococcus pneumoniae*, *Streptococcus viridans* group

Aerobic Gram-negative microorganisms:

*Acinetobacter lwoffii**, *Haemophilus influenzae*, *Haemophilus parainfluenzae**

Other microorganisms:

Chlamydia trachomatis

*Efficacy for this organism was studied in fewer than 10 infections.

CONTRAINDICATIONS: VIGAMOX® (moxifloxacin HCl ophthalmic solution) is contraindicated in patients with a history of hypersensitivity to moxifloxacin, to other quinolones, or to any of the components in this medication.

WARNINGS: NOT FOR INJECTION.

VIGAMOX® solution should not be injected subconjunctivally, nor should it be introduced directly into the anterior chamber of the eye.

In patients receiving systemically administered quinolones, including moxifloxacin, serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported, some following the first dose. Some reactions were accompanied by cardiovascular collapse, loss of consciousness, angioedema (including laryngeal, pharyngeal or facial edema), airway obstruction, dyspnea, urticaria, and itching. If an allergic reaction to moxifloxacin occurs, discontinue use of the drug. Serious acute hypersensitivity reactions may require immediate emergency treatment. Oxygen and airway management should be administered as clinically indicated.

PRECAUTIONS: General: As with other anti-infectives, prolonged use may result in overgrowth of non-susceptible organisms, including fungi. If superinfection occurs, discontinue use and institute alternative therapy. Whenever clinical judgment dictates, the patient should be examined with the aid of magnification, such as slit-lamp biomicroscopy, and, where appropriate, fluorescein staining. Patients should be advised not to wear contact lenses if they have signs and symptoms of bacterial conjunctivitis.

Information for Patients: Avoid contaminating the applicator tip with material from the eye, fingers or other source.

Systemically administered quinolones including moxifloxacin have been associated with hypersensitivity reactions, even following a single dose. Discontinue use immediately and contact your physician at the first sign of a rash or allergic reaction.

Drug Interactions: Drug-drug interaction studies have not been conducted with VIGAMOX® solution. *In vitro* studies indicate that moxifloxacin does not inhibit CYP3A4, CYP2D6, CYP2C9, CYP2C19, or CYP1A2 indicating that moxifloxacin is unlikely to alter the pharmacokinetics of drugs metabolized by these cytochrome P450 isozymes.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals to determine the carcinogenic potential of moxifloxacin have not been performed. However, in an accelerated study with initiators and promoters, moxifloxacin was not carcinogenic in rats following up to 38 weeks of oral dosing at 500 mg/kg/day (approximately 21,700 times the highest recommended total daily human ophthalmic dose for a 50 kg person, on a mg/kg basis). Moxifloxacin was not mutagenic in four bacterial strains used in the Ames *Salmonella* reversion assay. As with other quinolones, the positive response observed with moxifloxacin in strain TA 102 using the same assay may be due to the inhibition of DNA gyrase. Moxifloxacin was not mutagenic in the CHO/HGPRT mammalian cell gene mutation assay. An equivocal result was obtained in the same assay when v79 cells were used. Moxifloxacin was clastogenic in the v79 chromosome aberration assay, but it did not induce unscheduled DNA synthesis in cultured rat hepatocytes. There was no evidence of genotoxicity *in vivo* in a micronucleus test or a dominant lethal test in mice.

Moxifloxacin had no effect on fertility in male and female rats at oral doses as high as 500 mg/kg/day, approximately 21,700 times the highest recommended total daily human ophthalmic dose. At 500 mg/kg orally, there were slight effects on sperm morphology (head-tail separation) in male rats and on the estrous cycle in female rats.

Pregnancy:

Teratogenic Effects. Pregnancy Category C: Moxifloxacin was not teratogenic when administered to pregnant rats during organogenesis at oral doses as high as 500 mg/kg/day (approximately 21,700 times the highest recommended total daily human ophthalmic dose); however, decreased fetal body weights and slightly delayed fetal skeletal development were observed. There was no evidence of teratogenicity when pregnant Cynomolgus monkeys were given oral doses as high as 100 mg/kg/day (approximately 4,300 times the highest recommended total daily human ophthalmic dose). An increased incidence of smaller fetuses was observed at 100 mg/kg/day.

Since there are no adequate and well-controlled studies in pregnant women, VIGAMOX® solution should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Moxifloxacin has not been measured in human milk, although it can be presumed to be excreted in human milk. Caution should be exercised when VIGAMOX® solution is administered to a nursing mother.

Pediatric Use: The safety and effectiveness of VIGAMOX® solution in infants below 1 year of age have not been established.

There is no evidence that the ophthalmic administration of VIGAMOX® has any effect on weight bearing joints, even though oral administration of some quinolones has been shown to cause arthropathy in immature animals.

Geriatric Use: No overall differences in safety and effectiveness have been observed between elderly and younger patients.

ADVERSE REACTIONS: The most frequently reported ocular adverse events were conjunctivitis, decreased visual acuity, dry eye, keratitis, ocular discomfort, ocular hyperemia, ocular pain, ocular pruritus, subconjunctival hemorrhage, and tearing. These events occurred in approximately 1-6% of patients. Nonocular adverse events reported at a rate of 1-4% were fever, increased cough, infection, otitis media, pharyngitis, rash, and rhinitis.

Reference:

1. Data on file, Alcon Laboratories, Inc. 2005.

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some of the recommendations would not be consistent with the practice's mission.

Dr. Schuman's suggestions for the hospital corporation include pressing the billing service they use to provide feedback when insurers deny claims. He suspects that a goodly number of claims are undercoded and could be upgraded to receive a higher level of compensation. Ways to improve that situation could include an on-site coder to evaluate the appropriateness of codes 99213 vs. 99214, and to review supporting documentation, as well as more aggressive billing with the billing service receiving incentives for improved collections. Pediatricians and staff could be offered financial incentives to increase productivity. The hospital should consider investing in more spacious facilities, an EMR, and advertising as ways to improve efficiency and increase practice productivity. In this context, it is important to note that the corporation is currently willing to continue to subsidize Just So.

According to Gwen Mousin, who is Just So's practice director for the hospital corporation, having Just So across the street benefits the corporation in many ways: by diverting pediatric patients from the more costly services of the ED, channeling patients to hospital radiology and laboratory services, promoting use of the hospital's labor and delivery and nursery services, and referring patients to physicians and surgeons affiliated with the hospital.

At this time, the corporation thinks Just So is worth what it costs. But most importantly, the practice is meeting an important community need for pediatric care that would otherwise go unmet. It is not unique in this view. Many hospitals find owning nearby practices a viable business plan, even when they have to absorb cost overruns. But as health care costs continue their relentless rise, this model may not be able to survive.

Quality care and bottom line

As a hospital-owned practice located in an idiosyncratic, small Vermont town, Just So Pediatrics may not be typical. Yet the contrast it presents between aspirations to quality care for children and the exigencies of the bottom line is instructive. Whether Just So can continue to operate along the lines that make its pediatricians comfortable and patients well served remains an open question that readers will want to ponder. □