
If you’re cared for at the Avera Cancer Institute, you won’t have to travel far to receive your treatment. We know patients diagnosed with cancer will average 100 visits per year for care — and travel is the last thing you need to worry about. We’ve placed our growing network of cancer services around the region with that in mind. Our state-of-the-art technology is enhanced by more clinics in rural areas using telehealth services to offer the same high level of care wherever you are. That’s cancer care done differently.
The Region’s Leading Ear, Nose and Throat SPECIALISTS

Whether it’s an ear infection, snoring, voice conditions or a sinus infection, Sanford Ear, Nose and Throat provides comprehensive adult and pediatric ENT care for your patients and their families.

Our ENT services include:
- General ENT care (ear infections, tonsillectomies, voice conditions)
- Sinus care
- Hearing and balance
- Audiology
- Sleep and snoring/sleep apnea
- Treatment of Head and Neck Cancer
- Pediatric Cleft Lip and Palate
- Hemangiomas or birthmarks

Call (605) 328-8200 to refer a patient.

sanfordhealth.org, keyword: ENT
Contents

President’s Comments
299 Maintaining Relevance: A Key Question Facing Associations Today – Mary J. Milroy, MD

Alliance News
301 Enjoy Your Summer Without a Bite – Grace Wellman

Editorial
303 Playtime is Good Medicine for South Dakota's Children – Doneen Hollingsworth

The Journal
305 Evaluation of the South Dakota FitCare Child Care Provider Training Program
Targeting Nutrition and Physical Activity – Chad M. Bohn, MS; Derrick D. Haskins, BA;
Ryan K. Loo, PhD; Linda J. Ahrendt, MEd
315 Death Certification: A Primer, Part IV – Problems in Death Certification

Primers in Medicine
320 A Focus on Cardiovascular Risk Modification: Clinical Significance and Implementation
of the 2013 ACC/AHA Cholesterol Guidelines – Shawn C. Kelly, MD;
Rhyannon Gonzalo, PAS; Marian Petrasko, MD

Pharmacology Focus
325 Sunscreens: Protecting Skin from the Sun's Rays – Annette M. Johnson, PharmD, BCACP

Special Features
327 SDSMA Center for Physician Resources Practice of Medicine Series – Reducing Risk
at Transitions of Care
328 SDBMOE Board News – Tyler J. Klatt, MPA, Management Analyst
329 Quality Focus: 11th Statement of Work – Stephan D. Schroeder, MD
330 Patient Education: Rhythm of Life is a Powerful Thing – Richard P. Holm, MD
331 DAKOTACARE Update: 7 Years...Helpless, But Hopeful – E. Paul Amundson, MD
332 SDSMA PAC Membership 2014

Member News
333 For Your Benefit: Fighting for You and Your Patients
2015 SDSMA member Directory – Last Call for Updates!
SDSMA Member Directory a Great Advertising Opportunity
334 The Issue Is...Several Laws Went Into Effect July 1
Reporting Child Abuse
335 AMA Annual Meeting Focuses on Embracing Change
336 Webinar will Focus on Effective Patient Communication
SDSMA Center for Physician Resources Wealth Integration Forums

For the Record
339 CME Events

Advertisers In This Issue
340 Physician Directory
340 Classified Ads
What does the word “relevance” mean to the South Dakota State Medical Association (SDSMA)? To many associations in the U.S., it means precipitously decreasing members and loss of influence. Organizations from the PTA to the Shriners to professional and trade organizations are facing this question in crisis mode. Recently Barb Smith encouraged the SDSMA Executive Committee to read the book Race for Relevance: 5 Radical Changes for Associations. In this book, the authors examine some of the social changes that have threatened the traditional methods of organization and operation that associations have followed. Associations that do not heed the warning signs and begin open discussion about radical change may struggle to survive and will certainly fail to thrive.

In the past, many people automatically joined civic and professional associations. That is no longer true. People work longer hours and struggle for work-life balance. Time is precious and finite. When asked to join or volunteer for associations, people now demand projects that are meaningful and help them perform in their work. Additionally, they want projects that are interesting, involve causes they care about, and activities that are fun. They demand a return on the investment of their time. There are increased numbers of competing associations especially in the medical profession due to increased specialization and increased demand for more specialized services. Many of the services previously only offered by associations can now be obtained online or are provided by health care systems due to both consolidation and availability of new technology.

Generational differences may make joining associations less appealing to younger members. There are solutions available, but it will take courage to leave comfortable traditions behind and to become open to new ideas that radically shake up an organization. The result, however, is well worth it – a vibrant, nimble organization poised to be influential in this rapidly changing environment.

Fortunately, the SDSMA is in an enviable position of growing membership numbers and a solid financial base. But isn’t now the best time to open the discussion? To rest complacent and ignore the changes affecting other associations until a crisis presents does not seem wise.

Radical changes will not and should not happen overnight but the very act of opening the discussion is the first step to ensure continued relevance.

The recommended changes outlined in Race for Relevance are to overhaul the governance model, rework the committee structure, and empower the CEO and enhance staff. Additionally, associations should focus on member markets that can be served well, and examine their programs, services, and activities in order to zero in on the products and services that reflect the mission and that can be delivered consistently and effectively. Finally, it is essential to bridge the technology gap and build a framework for the future. The first and most critical step is to overhaul the governance model. The recommended size of an efficient board is much smaller than the large inefficient size of many boards. Another recommendation is to move toward a competency rather than a geographically selected board. Considering these questions presents a formidable challenge for an association, one that may take years to evaluate and implement.

Dr. Dan Heinemann started this process last year by raising these important questions and then by organizing a governance task force under the chairmanship of Dr. Chris Dietrich. This task force will evaluate the current SDSMA governance structure as well as possible alternatives. There is no time line, and input from the membership and the Council of Physicians will definitely be sought. The final recommendation could range from no change to radical change or a hybrid in the middle. I encourage all SDSMA members to think about this undertaking and I look forward to receiving your thoughts as I begin my district visits this fall.

In closing, I would like to share a quote from Dr. Robert Wah’s 169th AMA Presidential Inauguration: “Many find change a challenge, I see change as opportunity." The challenges facing associations may indeed provide a good opportunity for the SDSMA to take a good hard look at itself to identify what is working, take advantage of new opportunities and adopt innovative new methods in order to remain relevant to our members and further the missions of the SDSMA.
Sanford Surgical Associates.

Trust your patient’s surgery needs to the premier surgery team in the region. At Sanford Surgical Associates, our surgical team of 14 board-certified surgeons and 13 physician assistants and nurse practitioners is the largest and most experienced in South Dakota.

Our team of experts offers the latest in minimally invasive procedures, which means less pain, fewer scars and a faster recovery for your patients.

We also provide specialized hospital care with surgical intensive care, trauma and emergent surgical services.

Choose expert care. Choose Sanford. Call (605) 328-3840 to refer a patient.

sanfordhealth.org
keyword: Surgical Associates
Enjoy Your Summer Without a Bite

By Grace Wellman
SDSMA Alliance

“Mosquitoes very troublesome” was a frequent entry in Lewis and Clark’s journals from their early 1800s exploration of the Missouri River and the Louisiana Purchase, the territory which would eventually become South Dakota and other western states. The insects were one of the greatest pests and made life miserable for the explorers. Unfortunately, mosquitoes are a part of summer that we must endure, but they seem especially “troublesome” this year with all the wet weather. In fact, South Dakota is listed as number seven on Terminix Pest Control’s worst states for mosquitoes.

Unlike the Lewis and Clark expedition which was tortured by mosquitoes, we now know that mosquitoes are more than a nuisance to our summer enjoyment. There are more than 3,000 species of mosquitoes in the world with the overwhelming majority not affecting man. However, mosquitoes are the carriers of several serious diseases in humans and animals. West Nile disease is the most recent concern, but mosquitoes are the vectors of malaria and yellow fever, diseases that were previously problems earlier in our nation’s history and still common in tropical parts of the world. The bite of the mosquito is also the way dogs acquire heartworm, a common and serious parasitic disease in pets.

West Nile disease was first reported in South Dakota in 2002 after being identified in the U.S. in 1999. Since then, there have been more than 2,000 cases in our state, including 1,038 cases in 2003. There have been only six cases this year and no deaths. The virus infects several species of birds, including crows, jays and robins, and is passed to humans after a mosquito has bitten an infected bird.

Fortunately, West Nile infection is usually not a serious illness, with 80 percent of those infected asymptomatic. One in five of those infected may have symptoms of aches and fever, with less than one in 100 having severe disease with encephalitis/meningitis. The disease may appear two to 14 days after a mosquito bite. There is no vaccine or specific drug therapy and treatment is supportive.

How do we decrease our risk for West Nile disease now that we are in its peak season? Simply preventing mosquitoes from multiplying may be the most effective. Mosquito eggs and larva can exist in standing water of any size, even as small as a bottle cap.

Regularly empty or cover all unnecessary standing water around your home and yard. Spraying bushes and shrubs with insecticide may also reduce exposure.

Mosquitoes are active at dawn and dusk, and exposure can be limited by staying indoors during those times or by wearing recommended long sleeved, light colored shirts and pants (does this sound like attire in South Dakota?) It is only the female that bites you and not for its primary food source as blood is only necessary in the female for egg development. If you must be outside during times of mosquito activity, repellants can be effective. The EPA has determined that the normal use of DEET (N-diethyl-meta-toluamide) is not a health risk. DEET, sold in a variety of product names, remains the most widely used and is EPA-approved even for children older than two months in concentrations of 30 percent or less. A 30 percent application will protect for approximately five hours. DEET should be applied to children by adults and only to exposed skin. Treated areas should be immediately washed off after use. A combination sunscreen/DEET repellant should not be used as sunscreen is applied frequently. In addition to some concerns about DEET safety, the product has the annoying capability of dissolving some plastics and damaging synthetic fabrics. Picaridin, a synthetic product, and lemon eucalyptus oil, a natural product, may be alternatives.

The grumbling of Lewis and Clark about mosquitoes in their journals became more frequent and strident as they continued to explore the Missouri River and the Louisiana Territory. The men of the Lewis and Clark expedition had no effective deterrent to mosquito bites and no knowledge of the diseases transmitted by mosquitoes. Today we have effective insecticides and repellents when used appropriately.

Most importantly, we can greatly decrease our risk to mosquito bites and West Nile disease by altering our environment. Cover or drain all standing water to help reduce the breeding sites for mosquitoes. We are in the middle of the West Nile disease season which runs from June through September. So take the time for prevention and enjoy the rest of your summer without a bite!

Informative websites with links include the State of South Dakota Department of Health, Center for Disease Control and Prevention (CDC), Institute of Food and Agriculture of the University of Florida, the National Pesticide Information Center, and WebMD.
Get to the **CORE** of your pain

CORE Orthopedics Avera Medical Group is your Center of Regional Excellence (CORE) specializing in providing complete orthopedic care.

Dr. Jeffrey Kalo provides complete care in all orthopedic conditions with special interest in shoulder and knee disorders including cartilage preservation and restoration, sports-related injuries, as well as total joint replacement surgery. He is certified by the American Board of Orthopedic Surgery.

To refer your patients, call 605-336-2638 or 800-477-2899.

Jeffrey Kalo, DO

CoreOrthopedicsAvera.org  
2908 E. 26th St. • Sioux Falls, SD 57103
Each day, physicians across our state see the effects of the obesity epidemic in their practices. Perhaps the most concerning aspect of the obesity epidemic is its effect on children. Nationally, three times more children are obese today than just 30 years ago. Today, nearly one in three school age children in South Dakota are overweight or obese. In addition, more and more children are being diagnosed with obesity-related conditions that were traditionally only seen in adults — such as type 2 diabetes and high blood pressure. Even more disheartening, many of these children will experience serious conditions like heart disease, cancer and stroke as adults. If current trends continue, it is possible that we are raising a generation of Americans that will have shorter life-expectancy than their parents.

We know that the risk of obesity starts early in life. Over half of obese children become overweight by the age of 2, and approximately one in five children are overweight or obese by their sixth birthday. As the health community examines ways to combat the obesity epidemic in our state, it is important that we look to the environment where our young children spend most of their days—child care settings. According to U.S. census data, nearly 80 percent of South Dakota mothers work outside the home, a higher percentage than any other state in the nation. Naturally, this would point us toward a need to evaluate nutrition and physical activity in child care settings.

In 2007, the South Dakota Department of Health, the South Dakota Department of Social Services and Sanford Children’s partnered to equip child care providers and parents with tools to instill healthy behaviors in pre-school children. The program utilizes training, tools and technical assistance to increase healthy food choices and physical activity. Initially, one of the program’s key focuses was increasing physical activity, emphasizing a directed play model meant to keep children moving. Since its launch, the program has been revised several times and continues to be shaped by program evaluation, new research and best practices.

The, “Evaluation of the South Dakota fitCare Child Care Provider Training Program Targeting Nutrition and Physical Activity” on page 305 provides an initial snapshot of South Dakota’s success in changing the child care environment to improve the health and wellbeing of our state’s children. It is important to note the word evaluation in the title of the article; this study is quite different than the studies that typically appear in this publication. Rather than study the health of individuals, our purpose in conducting this evaluation study was to gather useful information to document the value of the program, guide program implementation and management, facilitate program improvement and identify best practices. In addition, the study also served to uncover areas for further examination and has provided us with important insight as we design future evaluations of the program.

Improving our children’s health will take a team effort — with parents, physicians, child care providers and educators playing a part. I hope the article provides insight into the success we are having in our efforts to fight childhood obesity.
A wealth of opportunities.
Let’s talk today about tomorrow’s potential.

NATHAN QUELLO, CFP®
Financial Advisor, RJFS

LOFT ADVISORS
A DIVISION OF FIRST DAKOTA NATIONAL BANK
805.333.8266 | loftadvisors.com
101 N. Main Ave. Suite 201
Sioux Falls, SD 57104

*Securities offered through Raymond James Financial Services, Inc., member FINRA/SIPC, and are not deposits, not insured by FDIC or any other governmental agency, not guaranteed by First Dakota National Bank, subject to risk, and may lose value. Loft Advisors and First Dakota National Bank are independent of Raymond James.
Evaluation of the South Dakota fitCare Child Care Provider Training Program Targeting Nutrition and Physical Activity

By Chad M. Bohn, MS; Derrick D. Haskins, BA; Ryan K. Loo, PhD; and Linda J. Ahrendt, MEd

Abstract

Introduction: Early childhood obesity is a significant health problem that has serious short- and long-term consequences. Recognizing the influence child care providers have on children, state programs have been created through federal funding initiatives to improve childhood health and reduce obesity rates. In 2011, South Dakota Department of Health received a five-year Centers for Disease Control and Prevention Community Transformation grant to improve healthy eating and active living. Grant funds were used to implement the fitCare Child Care Provider Training Program.

Methods: Child care providers in South Dakota volunteered to participate in fitCare training. Surveys were conducted among fitCare and non-fitCare participants to assess South Dakota child care provider implementation of proper nutrition and physical activities in child care settings.

Results: Survey findings showed that 52 percent of all providers surveyed have children, newborn to 2 years old, at their day care for more than 40 hours per week. Non-fitCare providers were more likely to provide additional servings of fruit than fitCare providers. Statistically significant findings showed that fitCare providers were more likely than non-fitCare providers to offer structured physical activity (p=<0.001). Rural Urban Commuting Area analysis was also performed showing differences between rural and urban areas.

Conclusions: Conclusions suggest that the physical activity components of fitCare training have a stronger impact on providers than the nutrition components. Future research should focus on strengthening the nutrition component of fitCare as well as increasing access to healthy foods. Suggestions are offered for improving the fitCare curriculum and training.

Introduction

Early childhood obesity is a significant health problem that has serious short- and long-term consequences. The Institute of Medicine reports almost 10 percent of U.S. infants and toddlers carry excess weight for their length and slightly more than 20 percent of children between ages 2 and 5 are already overweight or obese. Longitudinal research studies demonstrated that obesity in the first five years of life is associated with more immediate health problems such as diabetes and later-in-life diseases like cardiovascular disease. Behavioral and environmental factors found to increase the risk for obesity later in life were lack of healthy, age-appropriate feeding, too-little sleep, and too-much television. One of the places where children develop and learn health and wellness behaviors early in life is in child care settings.

The U.S. Census Bureau reported an estimated 12.5 million (61 percent) children spend time in child care for an average of 33 hours per week. Child care locations can be licensed settings, such as child care centers and family child care homes, and non-licensed settings, such as the homes of family, friends or neighbors. Because so many children are in child care for a large portion of the day, child care providers and environments are influential in shaping life-long behavior.

Recognizing the influence that child care providers have on children, federal initiatives (e.g., Healthy Hunger Free Kids Act 2010, Children’s Health Insurance Program Reauthorization Act 2009, American Recovery and Reinvestment Act: Prevention grants, and Community Transformation grants) were developed to help fund state programs directed at improving health across the lifespan.
In part, these initiatives and programs aim to improve child care settings in order to prevent and reduce rates of childhood obesity. The design of the initiatives was to provide a unique opportunity to teach healthy behaviors early in life.

In 2011, through the Community Transformation Grant (CTG) Program, the Centers for Disease Control and Prevention (CDC) provided support to the South Dakota Department of Health’s (SDDOH) implementation of community-based interventions to prevent chronic diseases. CTG awardees included 61 state and local governments, tribes and territories, and nonprofit organizations in 36 states, as well as six national networks of community-based organizations. The SDDOH’s Office of Chronic Disease Prevention and Health Promotion (OCDPHP) utilized a portion of CTG award funds to support the South Dakota Department of Social Services (SDDSS) in their implementation of the fitCare Child Care Provider Training Program (fitCare) which was designed to promote active living and healthy eating. fitCare was offered as a professional development opportunity for child care providers at Early Childhood Enrichment (ECE) offices located throughout the state.

The fitCare curriculum was designed during the fall of 2011. The first classes to train instructors began in November 2011. The first classes for family- and center-based child care providers began in February 2012. The fitCare curriculum was built upon the Fit from the Start curriculum designed to promote active living and healthy eating. The fitCare curriculum also incorporated elements of the Healthy Kids curriculum, which was developed by Sanford Children’s Hospital. Curriculum designers at Sanford Children’s Hospital recognized that the Fit from the Start and Healthy Kids curricula contained a lot of duplication and desired to merge the two programs into a single curriculum.

The purpose of this study was to examine South Dakota’s child care provider implementation of child health policies, specifically fitCare, and to assess the perceived benefits and barriers to adoption of this training program. While research exists on the effect policies and programs have had on children, more information needs to be published on how these policies and programs are being disseminated and used by child care providers, particularly at the state or community level.

**Methods**

fitCare provides education to child care providers to support the child’s development of healthy lifestyle habits. The curriculum design focuses on four areas, recharging (receiving proper rest), mood (impact of emotion and rest on choices), food (balanced and healthy nutrition), and move (necessary physical activity). Before their training, child care providers completed a pre-assessment to identify areas that may need improvement. Care givers were encouraged to develop an action plan to improve identified areas after training. Regionally-based ECE office staff members were available to help child care providers identify goals for improvement and how to develop their action plans. The ECE office staff members also provided technical assistance consultation/coaching sessions to help providers attain the goals identified in their action plan. ECE technical assistance and resource support was provided through on-site visits, telephone calls and email.

To assess the nutrition and physical activity offerings in child care settings as well as provider professional development, the SDDOH OCDPHP have conducted statewide surveys every three years. This longitudinal study was used to better understand the levels of nutrition, physical activity and professional development over time in the South Dakota’s child care settings as well as determine ways in which the state can assist providers in maintaining healthy child care environments.

Spectrum SD (Sioux Falls, South Dakota) was selected as an evaluation contractor to OCDPHP to design and conduct the 2013 phone survey which consisted of 61 questions for fitCare and 52 questions for non-fitCare participants and took an average of 15 minutes to complete. To conduct the phone survey, Spectrum SD also utilized a stratified random sampling of fitCare participants and non-fitCare participants from lists provided by the state. Providers participating in fitCare training were notified by mail that they may be contacted for survey participation.

Randomly selected providers were contacted by telephone (up to seven times with a message left at each unsuccessful attempt) from April 15 through May 1. Participants were excluded from the survey and analysis if they were not a state-licensed or registered child care provider or did not work at a state-licensed child care facility. A total of 294 providers completed the survey after exclusion criteria were applied.

Power calculations (Cohen’s $d = 0.5, \beta = 0.8$, 1-tailed) determined 291 providers were needed for a 95 percent confidence level (±5 percent) to ensure we had a
representative local sample to inform the evaluation of the broad reaching policy decisions. Post hoc one-tailed chi-square power analyses of the 294 providers were performed and determined a proportional difference between the two groups of 15 percent was sufficient to achieve an estimated power of 0.91. Power dropped below 0.80 when the proportional difference between the two groups was below 12 percent. Due to the multiple post-hoc comparisons, the Sidak-Holm correction was applied. While slightly less conservative than the Bonferroni correction, the Sidak-Holm correction reduces the possible risk of false negatives (type II errors). Three statistical measures were used for the analysis of the categorical survey data. Exact Mantel-Haenszel chi-square tests, Fisher’s exact tests, and Gamma coefficients were used to identify statistically significant trends in the among response categories as well as between the fitCare and non-fitCare groups. Statistics were performed using SPSS. Rural Urban Commuting Area (RUCA) was also utilized in the analysis to determine if there were response differences between isolated rural, small rural, large rural, and urban areas.

**Results**

The 2013 survey was completed by 294 child care providers and demographics are presented in Table 1. A significant difference was found in the 2013 sample for those who identified themselves as child care centers when disaggregated between fitCare and non-fitCare providers. Of fitCare providers, 72 (52.2 percent) identified themselves as child care centers. Only seven (5 percent) of non-fitCare providers identified themselves as child care centers. Comparing overall 2010 to 2013 demographics showed few differences between the samples.

**Training and Implementation of fitCare**

In 2010, the fitCare program did not exist, but care providers received training from existing programs such as Fit from the Start or Healthy Kids. Of all participants sampled in 2010, 32 percent attended one of these child care training sessions. In 2013, 47 percent of all sampled attended at least one fitCare training session. In all, there were four fitCare training sessions where 42 percent attended all four sessions, 26 percent attended two sessions, and 21 percent attended one session.

Forty percent of fitCare providers reported selecting both physical activity and nutrition as part of their action plan for their facility. When selecting just one goal, providers were twice as likely to select a physical activity goal as a nutritional goal. Of those who created an action plan, 45 percent have maintained their changes for less than six

<table>
<thead>
<tr>
<th>Table 1. Demographics of 2010 and 2013 Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2013 responses</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong># of Child Care Providers, n(%)</strong></td>
</tr>
<tr>
<td><strong># years provider has been licensed/registered or has worked at a state-licensed facility</strong></td>
</tr>
<tr>
<td>&lt; 1 year</td>
</tr>
<tr>
<td>1-5 years</td>
</tr>
<tr>
<td>≥ 6 years</td>
</tr>
<tr>
<td><strong>Center Child Care Provider</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td><strong># of children at facility</strong></td>
</tr>
<tr>
<td>1 to 12</td>
</tr>
<tr>
<td>13 to 20</td>
</tr>
<tr>
<td>≥ 21</td>
</tr>
<tr>
<td><strong>Received fitCare training</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Note: Sample sizes in columns may vary due to non-responses being excluded. Percentages may not equal 100 due to rounding.

*Sidak-Holm correction alpha = 0.008

** In 2010, the fitCare curriculum did not exist. The training in 2010 was Fit from the Start and Healthy Kids.
### Table 2. Comparison of fitCare and Non-fitCare Providers’ Nutrition and Physical Activity Responses

<table>
<thead>
<tr>
<th>Selected Survey Questions</th>
<th>% fitCare</th>
<th>% non-fitCare</th>
<th>p</th>
<th>2013 %</th>
<th>2010 %</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUTRITION QUESTIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What snacks and meals do you usually provide to children?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakfast</td>
<td>89.6</td>
<td>92.9</td>
<td>0.31</td>
<td>91.3</td>
<td>89.3</td>
<td>0.35</td>
</tr>
<tr>
<td>Morning snack</td>
<td>38.8</td>
<td>34.8</td>
<td>0.48</td>
<td>33.2</td>
<td>38.8</td>
<td>0.10</td>
</tr>
<tr>
<td>Lunch</td>
<td>96.3</td>
<td>99.4</td>
<td>0.06</td>
<td>97.9</td>
<td>97.7</td>
<td>0.85</td>
</tr>
<tr>
<td>Afternoon snack</td>
<td>100.0</td>
<td>100.0</td>
<td>1.00</td>
<td>100.0</td>
<td>95.1</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Late snack</td>
<td>14.2</td>
<td>11.0</td>
<td>0.41</td>
<td>12.5</td>
<td>15.8</td>
<td>0.19</td>
</tr>
<tr>
<td>For children aged 1 year or older, on average, how many vegetable servings do you offer to each child in a day?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>2.3</td>
<td>0.0</td>
<td>0.10</td>
<td>1.0</td>
<td>1.1</td>
<td>0.31</td>
</tr>
<tr>
<td>1</td>
<td>60.0</td>
<td>58.3</td>
<td>59.1</td>
<td>65.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>33.1</td>
<td>30.8</td>
<td>31.8</td>
<td>27.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3.8</td>
<td>8.3</td>
<td>6.3</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.0</td>
<td>1.9</td>
<td>1.0</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 5</td>
<td>0.8</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For children aged 1 year or older, on average, how many fruit servings do you offer to each child in a day?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1.5</td>
<td>0.0</td>
<td>0.03</td>
<td>0.7</td>
<td>1.0</td>
<td>0.63</td>
</tr>
<tr>
<td>1</td>
<td>21.4</td>
<td>14.7</td>
<td>17.8</td>
<td>15.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>51.1</td>
<td>51.3</td>
<td>51.2</td>
<td>55.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>23.7</td>
<td>31.4</td>
<td>27.9</td>
<td>24.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2.3</td>
<td>1.3</td>
<td>1.7</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 5</td>
<td>0.0</td>
<td>1.3</td>
<td>0.7</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For children aged 1 year or older, on average how many servings of desserts or sugary snacks do you offer to each child in a day?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>69.3</td>
<td>69.5</td>
<td>0.62</td>
<td>69.4</td>
<td>75.2</td>
<td>0.04</td>
</tr>
<tr>
<td>1</td>
<td>28.3</td>
<td>29.8</td>
<td>29.1</td>
<td>21.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.6</td>
<td>0.7</td>
<td>1.1</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 5</td>
<td>0.8</td>
<td>0.0</td>
<td>0.4</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>While at your child care facility, on average, how many times per day do the children drink sweetened beverages such as soda, sweetened fruit drink or Kool-Aid?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>88.1</td>
<td>91.6</td>
<td>0.26</td>
<td>90.0</td>
<td>92.8</td>
<td>0.15</td>
</tr>
<tr>
<td>1</td>
<td>11.2</td>
<td>8.4</td>
<td>9.7</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.7</td>
<td>0.0</td>
<td>0.3</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table below continues to present data from the survey on physical activity questions:

### Table 2. Cont.

<table>
<thead>
<tr>
<th>Selected Survey Questions</th>
<th>2013 responses</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fitCare</td>
<td>% non-fitCare</td>
</tr>
<tr>
<td><strong>PHYSICAL ACTIVITY QUESTIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On average, how many hours of TV do the children watch each day at your day care?</td>
<td>n=112</td>
<td>n=149</td>
</tr>
<tr>
<td>&lt; 1 hour</td>
<td>77.7</td>
<td>45.0</td>
</tr>
<tr>
<td>1-2 hours</td>
<td>21.4</td>
<td>49.7</td>
</tr>
<tr>
<td>3-4 hours</td>
<td>0.9</td>
<td>4.7</td>
</tr>
<tr>
<td>&gt; 4 hours</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Do you have structured physical activity time at your facility?</td>
<td>n=136</td>
<td>n=154</td>
</tr>
<tr>
<td>Yes</td>
<td>86.0</td>
<td>61.7</td>
</tr>
<tr>
<td>No</td>
<td>14.0</td>
<td>38.3</td>
</tr>
<tr>
<td>On average, how often is your structured physical activity time offered during the week?</td>
<td>n=116</td>
<td>n=95</td>
</tr>
<tr>
<td>1-2 times per week</td>
<td>13.8</td>
<td>24.2</td>
</tr>
<tr>
<td>3-4 times per week</td>
<td>18.1</td>
<td>20.0</td>
</tr>
<tr>
<td>Everyday</td>
<td>57.8</td>
<td>51.6</td>
</tr>
<tr>
<td>≥ 2 times per day</td>
<td>10.3</td>
<td>4.2</td>
</tr>
<tr>
<td>On average, how long is each structured physical activity time?</td>
<td>n=116</td>
<td>n=95</td>
</tr>
<tr>
<td>&lt; 15 minutes</td>
<td>13.8</td>
<td>6.3</td>
</tr>
<tr>
<td>15-30 minutes</td>
<td>66.4</td>
<td>55.8</td>
</tr>
<tr>
<td>31-59 minutes</td>
<td>10.3</td>
<td>22.1</td>
</tr>
<tr>
<td>≥ 1 hour</td>
<td>9.5</td>
<td>15.8</td>
</tr>
</tbody>
</table>

*Sidak-Holm correction alpha = 0.004. Note: Percentages may not equal 100 due to rounding.

Months. As providers were not asked the dates of when they attended their fitCare training, we cannot determine if the length of time between attending training and maintaining activities implemented through their action plans are related.

**fitCare Nutrition and Physical Activity**

**Nutrition**

Respondents were asked about their nutritional offerings to day care children and the results are presented in Table 2. Vegetable offerings increased between 2.7 percent and 4.4 percent from 2010 to 2013 for three vegetable serving or two vegetable servings daily, respectively. Fruit offerings increased between 2.7 percent for one serving and 3.2 percent for three servings daily from 2010 to 2013, respectively. However, none of these findings were significant after applying Sidak-Holm’s correction alpha for multiple analyses.

**Physical Activity**

Concerning physical activity, respondents were asked about their allowance of television per day for children, if they had a play area at or close to their facility, if they offered structured physical activity, and how often providers allowed children to play outside in a day. Rates, as presented in Table 2, were fairly similar between 2010 and 2013 with the exception of if a facility had structured physical activity, which had a statistically significant increase of 15.6 percent. Statistically significant findings were also found between fitCare and non-fitCare providers with non-fitCare providers allowing children to watch more hours of television. fitCare providers were also significantly more likely to have structured physical activity at their facility than non-fitCare providers.

**Rural Analysis of fitCare**

An analysis was conducted to determine the extent of fitCare participation in each of the RUCA categories. Findings show that regardless of RUCA category providers tended to have high rates of participation in the fitCare classes (Table 3). RUCA categories were also used for select survey questions.
Major findings of the RUCA analysis on survey responses for large rural areas, non-fitCare providers were frequently more likely to serve healthy snacks than fitCare providers. A trend was found that as RUCA categories moved from isolated to urban, non-fitCare providers offered a greater number of fruit servings in a day. In regards to physical activity, urban area fitCare providers were more likely to say that time was a barrier to additional physical activity than non-fitCare providers. As RUCA categories moved from isolated to urban, non-fitCare providers were less likely to claim time was a barrier to increased physical activity.

**Discussion**

Prevention of obesity in young children can be a strategy for preventing obesity later in life. We know that treatment interventions later in life focus on the individual, are costly, and can’t reach all population segments. Implementing prevention measures early in life through monitoring the child’s environment, educating care takers, and implementing health policy approaches have the lowest cost and can more broadly reach multiple population segments. Establishing broad-reaching health policies to prevent childhood obesity can be used to influence environmental change and in educating the public on how to improve child health behaviors.

The participant specific results in this evaluation should not be generalized to the larger population. Rather the results suggest improvements and changes to be made to the fitCare program. As the fitCare curriculum is modified, changes should lead to better educational information provided to the child care provider. The improved educational curriculum could help promote

### Table 3. Comparison of 2013 fitCare and Non-fitCare Providers’ Nutrition and Physical Activity Responses by RUCA Categories

<table>
<thead>
<tr>
<th>Selected Survey Questions</th>
<th>Isolated</th>
<th>Small Rural</th>
<th>Large Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRITION QUESTIONS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For children aged 1 year or older, on average, how many vegetable servings do you offer to each child in a day?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>47.1</td>
<td>69.6</td>
<td>50.0</td>
<td>69.2</td>
</tr>
<tr>
<td>3</td>
<td>41.2</td>
<td>21.7</td>
<td>50.0</td>
<td>7.7</td>
</tr>
<tr>
<td>4</td>
<td>11.8</td>
<td>8.7</td>
<td>0.0</td>
<td>23.1</td>
</tr>
<tr>
<td>≥5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>For children aged 1 year or older, on average, how many fruit servings do you offer to each child in a day?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>11.8</td>
<td>30.4</td>
<td>0.0</td>
<td>7.7</td>
</tr>
<tr>
<td>3</td>
<td>70.6</td>
<td>43.5</td>
<td>100.0</td>
<td>76.9</td>
</tr>
<tr>
<td>4</td>
<td>11.8</td>
<td>26.1</td>
<td>0.0</td>
<td>15.4</td>
</tr>
<tr>
<td>≥5</td>
<td>5.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>While at your child care facility, on average, how many times per day do the children drink sweetened beverages such as soda, sweetened fruit drink or Kool-Aid?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>94.1</td>
<td>95.5</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1</td>
<td>5.9</td>
<td>4.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>≥5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
On average, how many hours of TV do the children watch each day at your day care?

<table>
<thead>
<tr>
<th></th>
<th>Isolated</th>
<th>Small Rural</th>
<th>Large Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fitCare</td>
<td>% non- fitCare</td>
<td>p</td>
<td>% fitCare</td>
</tr>
<tr>
<td>&lt; 1 hr</td>
<td>73.3</td>
<td>22.7</td>
<td>0.004</td>
<td>100.0</td>
</tr>
<tr>
<td>1-2 hrs</td>
<td>26.7</td>
<td>72.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3-4 hrs</td>
<td>0.0</td>
<td>4.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>&gt; 4 hrs</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Do you have structured physical activity time at your facility?

<table>
<thead>
<tr>
<th></th>
<th>Isolated</th>
<th>Small Rural</th>
<th>Large Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fitCare</td>
<td>% non- fitCare</td>
<td>p</td>
<td>% fitCare</td>
</tr>
<tr>
<td>Yes</td>
<td>88.2</td>
<td>38.1</td>
<td>0.003</td>
<td>100.0</td>
</tr>
<tr>
<td>No</td>
<td>11.8</td>
<td>61.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

On average, how often is your structured physical activity time offered during the week?

<table>
<thead>
<tr>
<th></th>
<th>Isolated</th>
<th>Small Rural</th>
<th>Large Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fitCare</td>
<td>% non- fitCare</td>
<td>p</td>
<td>% fitCare</td>
</tr>
<tr>
<td>1-2 times per week</td>
<td>20.0</td>
<td>37.5</td>
<td>0.40</td>
<td>100.0</td>
</tr>
<tr>
<td>3-4 times per week</td>
<td>40.0</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Every day</td>
<td>20.0</td>
<td>37.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>≥ 2 times per day</td>
<td>20.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

On average, how long is each structured physical activity time?

<table>
<thead>
<tr>
<th></th>
<th>Isolated</th>
<th>Small Rural</th>
<th>Large Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fitCare</td>
<td>% non- fitCare</td>
<td>p</td>
<td>% fitCare</td>
</tr>
<tr>
<td>&lt; 15 min</td>
<td>6.7</td>
<td>12.5</td>
<td>0.11</td>
<td>0.0</td>
</tr>
<tr>
<td>15-30 min</td>
<td>93.3</td>
<td>50.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>31-59 min</td>
<td>0.0</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>≥ 1 hr</td>
<td>0.0</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Sidak-Holm correction alpha = 0.002. Note: Percentages may not equal 100 due to rounding.

long-lasting, environmental changes in childcare settings. A child care provider who makes changes in policy for their child care setting, impact the children under their care. It is hypothesized that improvements to the curriculum coupled with focused training would lead to helping children establish healthy habits and improved child outcomes such as reduced obesity rates and potentially lower chronic disease rates.

As was found in the results, many of the 2013 survey findings were consistent with 2010 survey findings even though the curriculum and provider trainings were different. Statistically significant findings found that non-fitCare providers outperformed fitCare providers in terms of healthier nutritional offerings in the child care settings. However, fitCare providers did offer more structured physical activity than non-fitCare providers. The increase in 2013 could be attributed to the addition of those who worked at a licensed facility, rather than only surveying licensed providers as was the case in 2010. Even in light of this sample difference, the results suggest that
GET READY FOR ICD-10

STAY ON THE ROAD TO 10 STEPS TO HELP YOU TRANSITION

The ICD-10 transition will affect every part of your practice, from software upgrades, to patient registration and referrals, to clinical documentation and billing.

CMS can help you prepare. Visit the CMS website at www.cms.gov/ICD10 and find out how to:

- Make a Plan—Look at the codes you use, develop a budget, and prepare your staff
- Train Your Staff—Find options and resources to help your staff get ready for the transition
- Update Your Processes—Review your policies, procedures, forms, and templates
- Talk to Your Vendors and Payers—Talk to your software vendors, clearinghouses, and billing services
- Test Your Systems and Processes—Test within your practice and with your vendors and payers

Now is the time to get ready.

www.cms.gov/ICD10
physical activity components of fitCare make a stronger impact than the nutrition components.

One of the topics that had a large focus in the curriculum was reducing screen time (i.e., computer, television, video games). The curriculum cites the American Academy of Pediatrics recommendation that children less than 2 years of age should have no screen time and children 2 years and older should have no more than two hours of screen time per day. While this is repeated in each of the curriculum modules through empirical-based evidence and logic-based reasoning, the message is clear that screen time should be limited or excluded. In the curriculum, limiting screen time is often used in conjunction with a statement on physical activity. Since care providers were told to limit or eliminate screen time, the next reasonable option may have been to engage in physical activity. What we are seeing may not necessarily be that the physical activity component is stronger but that the provider may have perceived that the alternative to screen time was physical activity. Understandably, nutrition would not be a logical alternative to screen time, but education on proper nutrition in place of screen time would.

The curriculum speaks to the nutrition requirements for children provided by the U.S. Department of Agriculture (USDA) or the Child and Adult Care Food Program (CACFP). The curriculum explains that “family child care and group family child care caregivers can enroll and participate in the Child and Adult Care Food Program” and child care centers “can participate in Child and Adult Care Food Program at the state level through Child and Adult Nutrition Services, Department of Education.” One of the limitations of the curriculum is it only lists the programs and their requirements. Child care providers may not know what to do with this information or where to access the services. Specific and guided instructions may be more beneficial for the provider on the specific nutritional programs they can access.

A limitation of the evaluation was we were not able to identify among all respondents if they represented family child care facilities or child care centers. Access to state and federal nutrition programs may be different for these two programs. Future evaluations should differentiate between family child care facilities or child care centers before the sampling procedure to ensure equivalent samples are obtained.

When revising the fitCare curriculum, stakeholders should consider what is available to providers in isolated rural versus urban settings. For instance, one of the findings found that a larger proportion of large rural and urban fitCare providers tended to access more technical assistance and coaching than isolated and small rural areas. An example of how to address the rural-urban disparity may be provided in how the curriculum addresses indoor and outdoor physical activity during bad weather. The curriculum encourages writing a back-up plan for having physical activities indoors if weather does not permit children to be outdoors. Similar to creating a bad-weather plan, curriculum should consider assisting providers in designing and planning physical activities which are less urban-centric and utilize resources available in more rural areas. In addition, plans could also include designing physical activities that involve all children, spanning age differences. These may not be redesigns to the curriculum but rather additional training and guidance that could be provided through technical support. Perhaps coaches may need to contact providers and inquire through a specific set of guided questions if providers in more rural areas need assistance.

Another area to focus future evaluations of the fitCare curriculum might include asking provider perceptions of the curriculum rather than just asking about their activities. This might provide more insight on desired content which can be correlated with observed outcomes. Also to be considered would be to invite more in-home providers to participate in fitCare. Although this researched focused on licensed providers and facilities, there is a large group of providers who should be reached. Involving as many groups as possible would perhaps maximize the effect the program was intended to have which was to improve the overall lifetime wellness of South Dakotans.

### REFERENCES


   Please note: Due to limited space, we are unable to list all references. You may contact South Dakota Medicine at 605.336.1965 for a complete listing.

### About the Authors

Chad M. Bohn, MS, Spectrum SD, Sioux Falls.
Derrick D. Haskins, BA, Office of Chronic Disease Prevention & Health Promotion, South Dakota Department of Health.
Ryan K. Lee, PhD, Spectrum SD, Sioux Falls.
Linda J. Ahrendt, MEd, Office of Chronic Disease Prevention & Health Promotion, South Dakota Department of Health.

### Acknowledgements

This paper was supported by a cooperative agreement with the Centers for Disease Control and Prevention (#1U58DP003510-01). Portions of this project’s work involve the Communities Transforming initiative supported by CDC funding. However, the findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention. Users of this document should be aware that every funding source has different requirements governing the appropriate use of those funds. Under U.S. law, no federal funds are permitted to be used for lobbying or to influence, directly or indirectly, specific pieces of pending or proposed legislation at the federal, state, or local levels. Organizations should consult appropriate legal counsel to ensure compliance with all rules, regulations, and restriction of any funding sources.
Save the Date

7th Annual Upper Midwest Regional Pediatric Conference

Sept. 25 & 26, 2014
Marina Inn & Conference Center
South Sioux City

A unique conference presenting the spectrum of care for the sick or injured child.

For conference information and updates go to www.UMRPConference.com
Death Certification: A Primer
Part IV – Problems in Death Certification

By Brad Randall, MD

Abstract

Beyond errors in diagnosis, procedural errors in completing the cause of death statement for the death certificate can usually be placed into a few distinct categories.

Physicians often forget, after struggling to deal with a litany of medical problems, that an external event, usually trauma, brought a patient into their care in the first place. In these instances, the death needs to be reported to the coroner and the coroner must certify the death (since it was the external event that actually started the chain of events leading to the death). Likewise, physicians also must recognize a death that was precipitated by seemingly simple and common trauma, such as a fall in an elderly individual (which may seem like a natural event), must be certified by the coroner.

Another common error in death certification is listing the elements of the cause of death statement in the wrong order, i.e., an order where one listing is not directly caused by the process listed directly under it.

While listing nonspecific processes, such as congestive heart failure, in the cause of death statement is perfectly acceptable, what caused these nonspecific processes must also be listed beneath them. If that cause is unknown, then that needs to be stated.

Abbreviations, of any kind, should not be part of the cause of death statement.

Physicians should certify deaths for those patients they are providing care for, and in whom death is the result of known medical conditions, regardless of whether they or other medical personnel were actually present (in attendance) to witness the death.

Over the years, the South Dakota Department of Health has encountered recurring errors (not including the unrecognizable diagnostic errors) on death certificates that could have been easily avoided by certifiers. These errors can be grouped into various categories as listed below:

Natural Versus Unnatural Manner of Death

South Dakota law dictates that coroners are required to investigate all deaths where the manner of death is, or might be, other than natural. The law goes on to state that the coroner alone may certify deaths that he or she investigates. This means that physicians cannot certify deaths where the manner of death is other than natural.

While most physicians are aware that coroners need to be notified for deaths with homicide and suicide manners of death, many are unaware that all deaths of accidental manner also need coroner notification and coroner death certification. Deaths of accidental manner, however, can cover a wide range of circumstances ranging from destructive trauma sustained in a motor vehicle crash to fractured hips sustained by an elderly individual falling getting out of bed in a nursing home.

A common scenario is for a patient to come into the hospital as a result of trauma, from whatever situation, and then suffer through a series of medical problems such as pneumonia, sepsis, renal failure, etc. to the point that the attending physician may well have forgotten what brought the patient to the hospital in the first place. Many of these deaths inappropriately are certified with medical causes of
death and of natural manner. Physicians need to be careful to remember what brought the patient into the hospital. The precipitating outside external event actually represents the cause of death since all of the medical problems were a consequence of that external event. Despite a patient’s difficult medical management, this type of case needs to be reported to the coroner and the coroner needs to certify the death.

Some physicians also feel that certain types of trauma are so common amongst certain populations of patients that the trauma actually is a natural part of the disease. Elderly osteoporotic individuals that sustain a simple fall resulting in a hip fracture, should they die (as many do), have a true cause of death as fall. Deaths resulting from benign appearing trauma like a simple fall need to be reported to the coroner who in turn has to complete the death certificate. The law simply states that all deaths occurring as a result of an accident, no matter how benign or trivial the accident may seem, need to be assigned an accidental manner of death, which requires coroner notification and coroner certification.

Occasionally physicians argue that some trauma actually results from underlying natural disease. For example, vertigo causing a fall, a fracture only occurring because of underlying osteoporosis, a heart attack precipitating a motor vehicle crash with serious trauma. While there is some logical merit to these arguments, death certification regulations do not allow external events to be caused by natural diseases. In the heart attack precipitating a motor vehicle crash example, for this to be a natural manner of death, the certifier would have to show that the decedent was doomed to die from their heart attack whether the vehicle crashed or not.

Physicians should also remember that accidents also happen as a result of medical care. Deaths occurring during a medical procedures or therapy that rarely is associated with death should be considered accidents regardless of any culpability. Since physicians rarely consider these types of deaths as accidental, they frequently do not notify the coroner of the death, which often can exacerbate legal problems in the future.

Wrong Sequence for the Cause of Death Statement

Cause of Death Statement – Incorrect

I. Astrocytoma
II. Acute pulmonary embolism

In this simple example of a disordered cause of death statement, the two lines should simply be inverted. The astrocytoma caused the pulmonary embolism (which couldn’t possibly have caused the astrocytoma). If the pulmonary embolism wasn’t felt to be the immediate mechanism of death, and no obvious mechanism was known, then it is perfectly acceptable to list the cause of death in this case as simply: Complications of Astrocytoma.

Cause of Death Statement – Incorrect

I. Severe atherosclerotic coronary artery disease
II. Sub-acute myocardial infarction
III. Ruptured left ventricle
IV. Massive hemopericardium

In this example, the cause of death statement is exactly backwards. The cause of death was the coronary artery disease that caused the myocardial infarction that caused the left ventricular rupture and hemopericardium. I give this example of a cause of death statement error since it illustrates that the diagnosis format often used in medical records, and particularly on autopsy reports, is the opposite of that used in the death certificate.

Cause of Death Statement – Incorrect

I. Chronic bladder infection
II. Urosepsis

Other Significant Condition(s): Quadriplegia

This example illustrates not only an upside down sequence (the chronic bladder infection actually caused the urosepsis), but also that the cause of death appears to actually be hiding in the other significant conditions section. The astute reader will further realize that the real cause of death for this individual however isn’t actually listed, i.e., what caused the quadriplegia? If the quadriplegia was the result of a natural disease process, such as a spinal tumor, then the physician could go ahead and certify this death. If on the other hand the quadriplegia was traumatic in origin (no matter how distant the trauma was in the past) the coroner would have to certify this death since the manner would no longer be natural.

These disordered cause of death statements usually reflect a certifier failing to assure that the conditions listed flow in a causal manner from the bottom up. In retrospect it usually is obvious when the listed order of mechanisms and underlying cause is scrambled. During the coding process however the health department personnel may not be as familiar with some medical conditions as physicians and, as a result, what should have been an intermediary mechanism may be inadvertently coded as a cause of death.
**Nonspecific Processes in the Cause of Death Statement**

There are several nonspecific processes that have a place in a cause of death statement, but not as the underlying cause of death. The most common nonspecific processes include (in part):

- Congestive heart failure;
- Respiratory failure;
- Renal failure;
- Gastro-intestinal hemorrhage;
- Sepsis; and
- Peritonitis.

All of the above represent intermediary mechanisms in the cause of death statement since all of these must have been caused by something. For example, congestive heart failure may be the result of coronary artery disease or chronic obstructive pulmonary disease, etc. Occasionally, however, a physician may not know the underlying cause of a nonspecific process. In that case, not knowing the cause needs to be stated in the cause of death statement. For example:

**Cause of Death Statement**

1. Severe upper gastro-intestinal hemorrhage, cause unknown

Alternatively, if the certifier feels a specific cause of the hemorrhage is more likely than not the above example could be stated as:

**Cause of Death Statement**

1. Severe upper gastro-intestinal hemorrhage
2. Presumed peptic ulcer disease

As mentioned in the second installment of this series, terms such as cardiac arrest and cardio-pulmonary arrest have no place in a cause of death statement.

**Specificity**

To correctly code a cause of death statement, the health department personnel (nosologists) need to clarify each process in the cause of death statement. For example, if the certifier has just listed cancer as a cause of death, this needs to be clarified as to the kind of cancer (both type and location). Likewise the generic statement of sepsis would need to include the location of the infection producing the sepsis and the responsible microorganism. The bottom line is that the certifier needs to put as much qualifying information into the cause of death statement as possible. This is particularly true for the underlying cause of death line.

Of course, sometimes the certifier does not know all of the specifics for a listed mechanism or cause. As discussed above, in that case the certifier needs to state that the qualifying information is unknown. For example, instead of just listing cancer as the underlying cause of death, the listing could be, brain cancer, type unknown or perhaps metastatic carcinoma of unknown origin.

**Abbreviations**

Hopefully this example will speak for itself:

**Cause of Death Statement – Incorrect**

1. AMI
2. CAD
3. IDDM

Other Significant Conditions: CHF, CRF, DVT, CABG

The best policy is to use no abbreviations when drafting a cause of death statement. Even such common abbreviations such as MI can be misconstrued and/or misread. The other obvious reason for avoiding abbreviations of course is that while common in the medical community they may be completely baffling to the family.

**Attending Physician?**

South Dakota law states that a physician caring for a patient should complete that patient’s death certificate. An attending physician is further defined in South Dakota statute as, “the physician who has primary responsibility for the treatment and care of the patient.” It is not stated in law or policy that the physician or other medical personnel actually need be present at the time of death. The South Dakota Department of Health (SDDOH) policy goes on to state that the physician shall sign the death certificate: “If a patient/decedent is attended by a physician, even if the physician is not physically present at the death, as long as:

(a) the patient (now decedent) was receiving care based on the physician’s orders for the illness that caused the decedent’s death; and (b) the physician feels qualified to sign the death certificate.”

The significance of the above is that if a physician is caring for a patient that the physician knows has a medical problem that could result in death, and that patient dies outside of medical care, the physician still has the responsibility to certify the death. That being said, it is incumbent upon the physician to check with the authorities investigating these out of hospital/nursing home facility deaths to assure that possible external events may not have been causative in the patient’s death. Only
Help Shape the Future of Medicine in South Dakota

The South Dakota State Medical Association Foundation, the philanthropic arm of the South Dakota State Medical Association, is a tax-exempt 501(C)(3) non-profit corporation, was established to assist and support medical research, medical teaching and medical education at the Sanford School of Medicine.

On average, medical students graduate with $130,000 in debt. Contributions to the South Dakota State Medical Association Foundation provide financial assistance to students at the Sanford School of Medicine and are all designated for scholarships, grants and low-interest loans for students.

Any amount can be donated at any time throughout the year. If you have questions or want more information, please call Laura Olson at 605.336.1965.

Send Your Contributions Today:
South Dakota State Medical Association Foundation
P.O. Box 7406, Sioux Falls, SD 57117-7406
www.sdsma.org
when the physician has no reason to explain a patient’s death should he or she defer certification of the death to the coroner.

No matter how long someone has been completing death certificates, from time to time unusual circumstances arise that seem to create certification round pegs for square holes. If a certifier has questions on how to complete a death certificate in South Dakota, they are encouraged to call the SDDOH at 605.773.4961 and ask the vital records staff for assistance or a referral to a physician consultant.

REFERENCES

1. SDCL 23-14-18.
2. SDCL 23-14-20.
4. SDCL 34-25-18
5. SDCL 34-12C-1(1)

General References

Physicians’ Handbook of Medical Certification of Death. Department of Health and Human Services, Centers of Disease Control and Prevention, Nation Center for Health Statistics. Hyattsville, Maryland. 2003


CDC websites


Instructions for completing the cause of death section of the death certificate 2002. www.cdc.gov/nchs/about/major/dvs/handbk.htm

About the Author:
Brad Randall, MD, Professor of Pathology, University of South Dakota Sanford School of Medicine; Sole Proprietor; Dakota Forensic Consulting.

The author is a paid consultant for the South Dakota Department of Health.
Introduction

The American College of Cardiology (ACC) and the American Heart Association (AHA) have introduced recent lifestyle, blood pressure, healthy weight, and cholesterol guidelines in an effort to limit atherosclerotic cardiovascular disease (ASCVD) development. Disease prevention is the principal focus of the guidelines, with the modification of cardiovascular risk an essential component in facilitating ASCVD event reduction. The etiology of cardiovascular disease is poorly understood; however, the pervasive use of statin therapy appears to significantly reduce the development of adverse cardiovascular events. In the current cholesterol guidelines, the use of statins is the primary strategy employed to minimize cardiovascular risk. This article will highlight the recent changes to clinical cholesterol management adopted by the cardiac professional societies in the U.S. and address why statins have become a central component of management.

ASCVD, defined as myocardial infarction, unstable angina, arterial revascularization, stroke, TIA, or peripheral vascular disease, is an expansive medical dilemma. Two constituents, myocardial infarction and cerebral vascular events, represent the primary and quaternary cause of death in American society. It is estimated that between 525,000 and 610,000 patients will endure their first episode of AMI and stroke in a given year. Hypertension, diabetes, and dyslipidemia are primary risk factors for the development of ASCVD, and are commonly associated with elevated BMI. The proportion of Americans who are overweight is reaching epidemic proportions—so the frequency of cardiovascular events is likely to increase. Recently, no global weight reduction strategy has proven efficacious, so implementation of practical therapies in addition to lifestyle modification is required to reduce excessive cardiovascular disease.

The 2013 ACC/AHA Blood Cholesterol Guidelines provided a new perspective in cholesterol management, focusing treatment objectives on event reduction in ASCVD instead of advanced lipid management. The purpose of the guidelines was to encourage the treatment of cholesterol in the at-risk populations using evidence-based treatments shown to improve cardiovascular health. These recommendations were released in conjunction with two other guidelines about obesity and hypertension, which are also significant public health risks. They reinforce the perception that cholesterol disorders and cardiovascular risk are closely intertwined, and effected by lifestyle factors such as diet and exercise, genetics, body habitus and tobacco use. The guidelines suggest that the adaptation of medical therapy in the absence of lifestyle modification will not sufficiently limit societal burden due to ASCVD.

Justification

The panelists acknowledge that several cholesterol treatment strategies have been previously evaluated and employed in clinical practice, including treat-to-cholesterol target, lower cholesterol is better, and lifetime risk-based treatment. However, only the fixed dosing of cholesterol lowering medications strategy has been utilized in multiple statin-based randomized control trials (RCTs). These trials represent the highest grade of evidence for use of statin therapy and were conducted over a 14-year period prior to 2009. Special evaluation of more recent high quality trials with ASCVD hard outcomes was conducted and included in the cholesterol guidelines prior to publication.

The expert panel purported that statin trials overall do not support the titration of therapy to an optimal LDL or HDL goal. There are a few trials which reported therapy titration; however the data is biased because titration only occurred in part of the treatment arm and endpoints could not be compared. A recurrent observation from the RCTs is that statin therapy provides a consistent reduction in ASCVD events in both primary and secondary disease populations. The relative reduction in ASCVD risk is also proportional to the degree to which LDL cholesterol is lowered. High dose statin therapy reduces ASCVD events more than lower intensity statin therapy. The use of the maximum tolerated dose of statin should be used in those patients who will derive most benefit. Patients who are on dialysis, have heart failure, or are over the age of 75 do not
always benefit from high intensity statin therapy.

**Implementation**

The populations that appear to benefit from statin therapy can be categorized into four groups: patients who have previously endured an ASCVD event, those with primary elevation of LDL to greater than 190mg/dl, diabetics, and those with an ASCVD 10-year risk score of less than or equal to 7.5 percent (Table 1). The ASCVD risk is calculated using a novel risk estimator called the Pooled Cohort Equation, which identifies patients with both coronary heart disease and stroke risk (Table 2). This equation was developed using ACSVD incidence data occurring in patients enrolled in large longitudinal trials. It uses gender and race as discriminators – two factors not previously well represented which can significantly modify your cardiovascular risk. This calculator should be used to estimate the ASCVD risk in non-Hispanic Caucasians and African Americans aged 40-79 years of age with LDL cholesterol between 70-189mg/dL. Hispanic, Asian, and Native American populations can currently be evaluated using the Caucasian analysis until further data is available. Of note, there is insufficient data on patients with heart failure or ESRD (dialysis dependent) to make recommendations for or against statin therapy. The treatment algorithm is summarized below (Table 3).

**Statin Categorization**

The categorization of statin therapy occurred due to the observation from systematic reviews that more potent dosing was associated with decreased cardiovascular risk. A reduction of LDL by 39mg/dl is associated with a 20 percent relative reduction in ASCVD events. Several statin preparations were represented in the clinical trials and a consistent dose dependent reduction in LDL was observed. Therefore, the available statin preparations and doses are categorized into a high, moderate, and low intensity group (Table 4). The following listed statins were used in RCTs that demonstrated a reduction in major cardiovascular events.12,16,19

**Ongoing Care**

Once a patient has been ascribed a risk profile and prescribed a statin, ongoing management is still required. Although a definitive lipid goal is not the treatment objective, monitoring will assist in determining compliance and ensuring that secondary causes of dyslipidemia are not overlooked. The recommendation is to have the lipid panel repeated 12 weeks following initiation of therapy. An expected reduction in LDL concentration should result in greater than 50 percent with high intensity statins and 30 to 50 percent reduction with moderate intensity statins.17

---

**Table 1.**

<table>
<thead>
<tr>
<th>Four Major Statin Benefit Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical ASCVD</strong></td>
</tr>
<tr>
<td>LDL ≥190 (age 21-75)</td>
</tr>
<tr>
<td>Diabetes (age 40-75)</td>
</tr>
<tr>
<td>10 yr risk ≥7.5% (age 40-75)</td>
</tr>
</tbody>
</table>

**Table 2.**

<table>
<thead>
<tr>
<th>Pooled Cohort Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex, Age, Race, Total cholesterol, HDL, SBP</td>
</tr>
<tr>
<td>BP treatment, Diabetes, Smoking</td>
</tr>
</tbody>
</table>

**Table 3.**

<table>
<thead>
<tr>
<th>2013 ACC/AHA Cholesterol Treatment Algorithm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit Group1</td>
</tr>
<tr>
<td>Treatment Intensity</td>
</tr>
<tr>
<td>(Statin Potency)2</td>
</tr>
<tr>
<td><strong>Clinical ASCVD</strong></td>
</tr>
<tr>
<td>age ≤ 75</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>age &gt; 75</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td><strong>LDL ≥190 (age 21-75)</strong></td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td><strong>Diabetes (age 40-75)</strong></td>
</tr>
<tr>
<td>10-yr risk ≥7.5%</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>10-yr risk &lt;7.5%</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td><strong>10-yr risk ≥7.5% (age 40-75)</strong></td>
</tr>
<tr>
<td>Moderate to High</td>
</tr>
</tbody>
</table>

---

1Recommendation excludes patient with CHF NYHA II-IV and requiring dialysis.

2Treatment intensity refers to the expected reduction in LDL.

310-year risk calculated using Pooled Cohort Equation.

**Table 4.**

<table>
<thead>
<tr>
<th>High Intensity (Expected LDL reduction ≥50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atorvastatin 40-80mg Rosuvastatin 20mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moderate-Intensity (Expected LDL reduction 30-50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atorvastatin 10mg Rosuvastatin 10mg Simvastatin 20-40mg Pravastatin 40mg Lovastatin 40mg Fluvastatin 40mg bid</td>
</tr>
</tbody>
</table>

**Table 5.**

<table>
<thead>
<tr>
<th>Secondary Causes of Elevated LDL-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet Saturated fats, trans-fats, weight gain, anorexia</td>
</tr>
<tr>
<td>Drugs Diuretics, cyclosporine, gluco corticoids, amiodarone</td>
</tr>
<tr>
<td>Diseases Biliary obstruction, nephrotic syndrome</td>
</tr>
</tbody>
</table>
Failure to respond likely represents secondary causes of dyslipidemia such as: medication compliance issues, drug interactions, or failure to adapt lifestyle recommendations (Table 5). Although measurement of baseline hepatic function is advocated, routine enzymatic evaluations of muscle, liver, and glycemic function are discouraged following initiation of statin therapy.

The incidence of adverse drug reactions to statin therapy is low as listed in (Table 6). Randomized control trials did not reveal significant alteration in hepatic enzymes. It is considered reasonable to measure hepatic function when clinical feature of hepatotoxicity are present: including unusual fatigue and weakness, anorexia, abdominal pain, and dark urine. CK evaluation is endorsed when myositis symptoms exist: weakness and fatigue, muscle pain, tenderness, stiffness, cramping. Statin induced myopathy is a rare entity and true myositis is likely only when CK increases three times above the baseline. Adverse events are more likely to occur in patients with underlying comorbidities and higher risk features, and it is reasonable to start these patients on a lower intensity statin therapy (Table 7). The promotion of statin safety and tolerability is improved by routine clinical assessment of not only muscle, hepatic, and glycemic health, but encouraging ongoing healthy lifestyle. If an adverse event occurs, the patient should be restarted on a lower dose or an alternative statin preparation when clinically feasible. Adverse events do not necessitate ascribing an allergy to all medications in the class. Otherwise, termination of statin therapy is only recommended when LDL is demonstrated to be less than 40mg/dl on two consecutive occasions. Although the guidelines do not provide instruction on the use of non-statin therapy, it does provide insight into the safety of these agents (Table 8).

### Table 6. Adverse Drug Reaction Incidence in Statin Therapy

<table>
<thead>
<tr>
<th></th>
<th>Moderate-Intensity (events per 100 treated)</th>
<th>High Intensity (events per 100 treated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Myopathy</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Hemorrhagic stroke</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

### Table 7. Patient Characteristics that Influence Statin Safety

- Impaired renal function
- Impaired hepatic function
- History of previous statin intolerance
- Muscle disorders
- Concomitant use of drugs affecting statin metabolism
- History of hemorrhagic stroke
- Age > 75

### Table 8. Clinically Relevant Safety Concerns of Nonstatin Therapies

<table>
<thead>
<tr>
<th>Niacin</th>
<th>Bile Acid Sequestrants</th>
<th>Cholesterol-Absorption Inhibitors</th>
<th>Fibrates</th>
<th>Omega-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperglycemia</td>
<td>Triglyceride elevation</td>
<td>Hepatic enzyme induction</td>
<td>Myalgia</td>
<td>GI symptoms</td>
</tr>
<tr>
<td>Cutaneous flushing</td>
<td>(Discontinue if TGA &gt; 400mg/dL)</td>
<td>(Discontinue if ALT &gt; 3 times the upper limit)</td>
<td>Rhabdomyolysis</td>
<td>Bleeding diathesis</td>
</tr>
<tr>
<td>Hepatic enzyme induction</td>
<td></td>
<td></td>
<td>(Discontinue if GFR &lt; 30, Reduce dose when GFR &lt; 60)</td>
<td>Skin complaints</td>
</tr>
<tr>
<td>Hyperglycemia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GI symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gout</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Primers in Medicine)
12.8 million new patients at risk. Some suggest that this will result in excessive prescription of statins and therefore increased the potential for adverse drug reactions.

Safety concerns regarding statin therapy have been identified and appropriately addressed in the guidelines, and current evidence-based literature suggests that these are rare episodes. Statin use has been associated with a significant reduction in cardiovascular events suggesting that prevention appears to be an efficacious strategy, potentially preventing an estimated 475,000 events. To bring it into perspective, $190 billion in health care expenditure is attributable to overweight and obesity-related illness. Two-thirds of the population is considered overweight, so frequency of events is likely to increase without adequate attention. The guidelines not only suggest an efficacious strategy for reducing cardiovascular events, but elucidate the importance of lifestyle modification – healthy diet, weight reduction, regular exercise and smoking cessation. Furthermore, high intensity statins, such as atorvastatin, are now available in a generic formulation, making it an inexpensive therapy.

The working group acknowledges that these guidelines are not intended to address advanced lipid disorders. Further research is going to be required to adequately address the gaps in the guidelines related to complete lipid management, specifically in primary prevention of the elderly, use of alternate non statin cholesterol medications, and use of lipid ratios or particle compositions.

Although not an exhaustive guideline, the current ACC/AHA Cholesterol Guidelines will undoubtedly promote improvement in cardiovascular health.

REFERENCES


Please note: Due to limited space, we are unable to list all references. You may contact South Dakota Medicine at 605.336.1965 for a complete listing.

About the Authors:
Shawn C. Kelly, MD, University of South Dakota Sanford School of Medicine.
Rhyannon Gonzalo, PAS, University of South Dakota Sanford School of Medicine.
Marian Petrasko, University of South Dakota Sanford School of Medicine.

Volunteers Needed!

SERV SD
STATEWIDE EMERGENCY REGISTRY OF VOLUNTEERS

What is SERV SD? A database of pre-registered health care professionals and who are ready to volunteer in the event of an emergency.

Who should volunteer? Everyone! All skill levels and experience needed.

Who do I contact if I have questions? SERV SD Program Coordinator 1-800-738-2301 SERVSD@state.sd.us

Visit us online: http://SERV.SD.gov

No obligation to deploy, only if it's right for you.

Child & Adolescent Neurology
Jorge D. Sanchez, MD

Complete care for children and adolescents, treating:
- Headaches
- Seizures
- Cerebral palsy
- Epilepsy
- Developmental delays
- Movement disorders
- Attention difficulties
- Learning disabilities

EEG services, including ambulatory EEG monitoring
New treatment for children with intractable seizures
Acupuncture treatment available
Outreach clinics available in Mitchell and Rapid City

Child & Adolescent Neurology
117 W. 39th St.
Sioux Falls, SD 57105
605.334.8000

Jorge D. Sanchez, MD
Celebrating Excellence

Outstanding Service

David Kovaleski, MD
Department of Internal Medicine
USD Sanford School of Medicine

Recipient of the 2013-2014
Department of Internal Medicine Service Award

Dr. Kovaleski was born in Casper, Wyoming. He served four years in the Air Force before returning to school and graduating from South Dakota School of Mines and Technology in Rapid City with a BS in Chemistry and Interdisciplinary Science. His MD and Internal Medicine Residency were completed at USD Sanford School of Medicine. He went on to a Nephrology Fellowship at Virginia Commonwealth University in Richmond, Virginia and then a Critical Care Fellowship at the University of Nebraska in Omaha. Dr. Kovaleski is an Associate Professor of Medicine and the Division Chief of Critical Care Medicine for the Department of Internal Medicine. He was awarded the Chairman’s Award for Excellence in 2001. He serves on the Student Progress and Conduct Committee as well as the Faculty Development Committee for USD Sanford School of Medicine. He is a fellow of the American College of Physicians and the American College of Chest Physicians. He is affiliated with the Avera Medical Group Nephrology and serves as the Medical Director of the Avera eICU.

“Dr. Kovaleski is dedicated to improving the critical care medicine curriculum for the internal medicine residents. He eagerly worked to create an updated, comprehensive educational program with a novel asynchronous learning activity, which will better prepare our residents to care for patients in the ICU. He has a passion for teaching that is noted by the residents in their evaluations which are uniformly excellent. Dr. Kovaleski reaches out to all Division members to work collaboratively in making the critical care rotation the best ever. I am pleased to honor Dr. Kovaleski for his outstanding accomplishments.”

LuAnn Eidsness, MD, FACP
Professor and Chair, Internal Medicine

Paid for by private donations to the Department of Internal Medicine
In the summer sun, it is always important to remember to apply sunscreen to help protect our skin. It is just as important to remember that we are exposed to the sun’s harmful rays throughout the year. Sunscreens are important to use especially in summer when more skin is exposed but also should be considered through the other seasons of the year.

Ultraviolet radiation (UVR) spectrum is classified into three bands: UVA (315-399 nm), UVB (280-314 nm), and UVC (100-279 nm). UVC is completely absorbed by the ozone layer and atmosphere so does not pose much of a risk. UVB is mostly absorbed by the ozone layer, but does pose risk as some does reach the Earth’s surface. UVA is not absorbed by the ozone layer and therefore can cause harm.1

UVA and UVB are the rays that can cause sunburn, skin cancer, cataracts, premature aging of the skin and suppression of the immune system. UVB exposure also generates vitamin D3 synthesis. Peak levels of UVB exposure occur between 10 a.m. and 4 p.m. daily. Unlike UVB, UVA radiation levels can reach the Earth’s surface anytime of the day or year and are not filtered by glass. UVA is also primarily responsible for producing photosensitivity while UVB is mostly responsible for sunburn.1

The Food and Drug Administration (FDA) has published regulations that establish standards for efficacy testing and accurate labeling of sunscreen products. The latest regulations established a standard broad spectrum test for over the counter sunscreen products. Those products that pass the broad spectrum test have proven protection against both UVA and UVB rays. The products with UVA and UVB protection are labeled on the front with “Broad Spectrum” and SPF 15 or higher. Consumers are also informed that sunscreens with this labeling not only protect against sunburn but also can help decrease the risk of skin cancer and early skin aging if used appropriately and with other sun protection. Higher SPF values provide higher levels of sun protection. Sunscreens that are not labeled with “Broad Spectrum” or that have an SPF of 2 to 14 can help prevent sunburn but provide no other skin benefits. Additionally, the products not considered broad spectrum must be labeled with the following warning: “Skin cancer/skin aging alert: Spending time in the sun increases your risk of skin cancer and early skin aging. This product has been shown only to help prevent sunburn, not skin cancer or early skin aging.”2

The regulations also address water resistance. Water resistance claims on sunscreen labels need to tell the consumer how much time to expect the SPF in the product to be effective while in water or sweating. This is based on standard testing and can be listed as 40 minutes or 80 minutes. Products no longer can make “waterproof” or “sweatproof” claims or be labeled as “sunblocks.” Sunscreens must get FDA approval to claim immediate protection or protection for more than two hours without reapplying.2

At the same time as the release of these regulations, the FDA also requested data and information on different dosage forms of sunscreen products. The dosage forms that currently are considered eligible for inclusion in the OTC sunscreen monograph are oils, creams, lotions, gels, butters, pastes, ointments, sticks and sprays. Any other application form must submit an application to the FDA. The FDA specifically requested additional data on sunscreen sprays as they are a significantly different dosage form, and they wanted to assess whether there is a safety concern with inadvertent inhalation.2 Although these regulations became effective in 2012, Consumer Reports released a recommendation in July 2014 that spray sunscreens not be used on children until the FDA ruled on their safety. They report the concern with inhalation, especially in children, as the reason they recommend not using spray sunscreen.1 The FDA has not released any information about the safety of spray sunscreen.

The American Academy of Dermatology recommends the following for safe and effective sunscreen use:4

- Choose a product with an SPF 30 or higher, that is broad spectrum, and is water resistant for up to 40 to 80 minutes.
- Sunscreen should be applied generously about 15 minutes before sun exposure. That allows time for the skin to absorb the sunscreen.

By Annette M. Johnson, PharmD, BCACP

Sunscreens: Protecting Skin from the Sun’s Rays

Pharmacology Focus
• Use one ounce of sunscreen as the appropriate amount to cover all the exposed areas of the body completely.
• Apply to all exposed skin including neck, face, ears, and tops of feet.
• Protect lips with lip balm that has an SPF of 15 or greater.
• Reapply sunscreen no longer than every two hours or immediately after swimming or excessive sweating.
• Skin is exposed to harmful UV rays even on cloudy days and in winter so make sure to use sunscreen in these situations also.

Sunscreen should not be the only method of sun protection to minimize long-term effects of UV exposure. Everyone should also avoid deliberate tanning with indoor or outdoor light, seek shade, wear protective clothing, and limit exposure during peak times of the day (10 a.m. to 4 p.m.).

Patients on medications causing potential for photosensitivity reactions should use a broad spectrum sunscreen. Drugs associated with photosensitivity reactions include but are not limited to: tretinoin, non-steroidal anti-inflammatory drugs, sulfa-based medications, diuretics, hypoglycemic agents, many anti-infective agents such as quinolones and azithromycin, and even some sunscreens.6,5

Sunscreens work to prevent sunburn, photosensitivity reactions, premature aging of skin, and skin cancer, therefore, limiting or avoiding UVR exposure, sunscreen use, and use of protective clothing should be combined for skin protection. For optimal skin protection, a broad-spectrum sunscreen should be used. A sunscreen product with an SPF of at least 30 will provide the greatest protection. It is also important to remember the need to apply and reapply an appropriate amount. The proper use of sunscreens is one of the best defenses against the damaging effects of UV radiation.

REFERENCES

About the Author:
Annette M. Johnson, PharmD, BCACP, South Dakota State University College of Pharmacy.
An 81-year-old woman was treated and discharged from the emergency department (ED) to her nursing home with orders including several medications. The nursing home nurse reconciled the medication orders with the resident’s previous medication orders and noted a discrepancy: The resident’s anticoagulant dosage had been increased considerably. The nurse tried to reach the ED physician who had seen the woman, but his shift was over and he was unavailable. One week after readmission to the nursing home, the woman developed a severe nosebleed and had to be transported back to the ED. While in the ED, her international normalized ratio level was critically high. She was admitted for treatment and observation. During the night she became disoriented, got out of bed without assistance, and fell, hitting her head on a window sill. She died later that day. It was later determined that her anticoagulant medication dosage was erroneously increased when the original ED physician wrote the discharge orders.

Breakdowns in communication during transitions of care, especially between the ED and post acute care facilities (e.g., nursing homes and assisted living facilities), are a frequent cause of patient injury and often lead to readmission to the hospital. Common root causes of communication breakdowns across the continuum of care are:

- Unfamiliarity with the other health care organization’s processes;
- Lack of teamwork training; and
- Lack of standardized communication tools, especially tools to reconcile medication and treatment orders.

Confusion about and discrepancies in medication orders are a frequent cause of adverse drug events, especially for elderly patients on multiple medications. A study of medication errors reported by long term care facilities revealed 11 percent of errors involved a transition of care to the hospital. Common root causes of communication breakdowns across the continuum of care are:

How to improve:

- Standardize transfer criteria and utilize transfer forms;
- Clearly identify who should be called to clarify admission and transfer orders;
- Document the purpose of the medication and the reason for any medication changes on admission and transfer orders;
- Use standard communication processes and tools, such as SBAR (Situation, background, assessment, recommendation) when communicating between physicians and nurses;
- Communicate the details of the patient’s transfer via phone, allowing time for question and answer;
- Improve the process of order and medication reconciliation at transitions of care;
- Utilize computer provider order entry with sophisticated clinical decision support systems incorporating lab values.

And don’t forget about the patient. Studies indicate patients are often confused about medications, home care and follow-up instructions. Effective communication with the patient is essential to provide safe and effective care. Hospitals, ED physicians and ED nursing staff should make purposeful efforts to ensure that patients understand their condition, treatment, test results and necessary follow up care upon discharge from the ED.

In the next issue, we’ll take a closer look at the risks associated with patient hand-offs.
SDBMOE Board News

By Tyler J. Klatt, MPA, Management Analyst
South Dakota Board of Medical and Osteopathic Examiners

Board Receives Grant

The Federation of State Medical Boards Foundation, along with the University of Nebraska Medical Center – Center for Continuing Education, The France Foundation, the American Osteopathic Association for Medical Informatics, and the Federation of State Medical Boards have awarded the South Dakota Board of Medical and Osteopathic Examiners a grant for continuing medical education (CME) regarding Opioid Analgesics Risk Evaluation and Mitigation.

What is it?
The CME activity is entitled Extended-Release and Long-Acting (ER/LA) Opioid Analgesics Risk Evaluation and Mitigation Strategy.

How many credits is it worth?
The University of Nebraska – Continuing Education Center has designated this live CME for a maximum of three credits.

What are the take home messages?
The CME will focus on seven important learning objectives:

- Appropriately assess patients for the treatment of pain with ER/LA opioid analgesics, including analyzing risks versus potential benefits;
- Assess patient’s risk of abuse, including substance use and psychiatric history;
- Identify state and federal regulations on opioid prescribing;
- Incorporate strategies to effectively initiate therapy, modify dosing or discontinue use of ER/LA opioid analgesics;
- Manage ongoing therapy with ER/LA opioid analgesics;
- Incorporate effective counseling for patients and caregivers about the safe use of ER/LA opioid analgesics; and
- Discuss general and product-specific drug information related to ER/LA opioid analgesics.

Who should participate in this CME?
The primary audience will be clinicians who are registered with the DEA, eligible to prescribe schedule 2 and 3 drugs, and who have written at least one ER/LA opioid script in the past year.

Statement of Need
Chronic pain is a major public health problem in the U.S. and has been estimated to affect up to one-third of Americans. However, after a decade of standard setting and research on pain control, health care practitioner assessment and management of patient pain continues to be inadequate. Evidence-based guidelines emphasize thorough patient assessment, prompt recognition of patient pain, frequent monitoring, multimodal analgesic therapies, and patient input; yet, there are persistent gaps in clinicians' knowledge and practice around key areas of chronic pain management. Additionally, rates of misuse and abuse of nonprescription medications have not abated over the past decade, resulting in addiction, drug poisoning, and overdose death. Despite these concerns, appropriate use of opioids can improve a patient's quality of life. Thus, education on best practices for opioid safe use is critical for all clinicians managing patients with chronic pain.

REFERENCES
Quality Focus:
11th Statement of Work

By Stephan D. Schroeder, Medical Director, South Dakota Foundation for Medical Care

South Dakota Foundation for Medical Care (SDFMC) has been serving South Dakota health care providers and Medicare beneficiaries to improve the quality of health care since 1973. In this role, SDFMC serves as a quality improvement facilitator and local resource to health care professionals. Past statements of work, or contracts with the Centers for Medicare & Medicaid Services (CMS), included both quality improvement efforts and case review/peer review services.

Starting Aug. 1, 2014, SDFMC will be working under a new era of quality improvement for CMS, known as the 11th Statement of Work. Scheduled to run five years, through July 2019, this contract will refocus efforts around patient and family engagement. The goals of the 11th Statement of Work align with the CMS Quality Strategy at the national level:

Goal 1 – Promote Effective Prevention and Treatment of Chronic Disease
- Improving Cardiac Health and Reducing Disparities
  - Recruit home health agencies and physician offices to spread the implementation of evidence-based practices: aspirin therapy when appropriate, blood pressure control, cholesterol management, and smoking assessment and cessation.
- Everyone with Diabetes Counts
  - Improve clinical outcomes of HbA1c, lipids, blood pressure, weight for Medicare beneficiaries with diabetes.
  - Facilitate diabetes self-management education training for Medicare beneficiaries and improve health literacy.
- Improving Prevention Coordination through Meaningful Use of HIT and Collaborating with Regional Extension Centers
  - Partner with Healthpoint, the regional extension center in South Dakota, to provide education about the benefits of using HIT to improve care.
  - Improve delivery of preventive services through data analytics and EHRs.
  - Establish electronic connections with beneficiaries and families.

Goal 2 – Make Care Safer by Reducing Harm Caused in the Delivery of Care
- Reducing Healthcare-associated Infections in Hospitals
  - Recruit hospitals to prevent infections using evidence-based prevention strategies.
  - Decrease standardized healthcare-associated infection ratios.

- Reducing Healthcare-acquired Conditions in Nursing Homes
  - Recruit nursing homes to participate in statewide collaborative.
  - Improve mobility among long-stay residents and decrease use of unnecessary antipsychotic medications.
  - Help 1-star Nursing Homes improve their outcomes.

Goal 3 – Promote Effective Communication and Coordination of Care
- Coordination of Care
  - Convene community providers and stakeholders in coalitions, working on reducing hospital readmission rates.
  - Reduce adverse drug events that contribute to patient harm.

Goal 4 – Make Care More Affordable
- Quality Improvement through Value-Based Payment, Quality Reporting, and the Physician Feedback Reporting Program
  - Assist physicians, hospitals, inpatient psych facilities, and ambulatory surgical centers with improving quality measures, resulting in better outcomes for CMS payment programs.
- QIN-QIO Proposed Projects that Advance Efforts for Better Care at Lower Cost
  - Identify new models of service delivery that hold the promise of the CMS aims – better health, better health care, and lower costs through improved quality.
- Quality Improvement Initiatives
  - Receive referrals for providers in need of assistance with root cause analysis and quality improvement plans.

Learning and Action Networks
A unique opportunity to improve health care is through the learning and action networks that SDFMC will be forming. These networks provide the framework to “all teach, all learn” and spread best practices across South Dakota to all interested participants. Our partnership with QIOs in North Dakota, Nebraska, and Kansas will allow us to showcase health care leaders and experts to a larger audience. Patient and family engagement will be integrated into all of the aims. SDFMC will be reaching out to eligible providers and partners to invite them to participate this fall. Please keep an eye on SDFMC.org to be a part of our learning and action networks.

“Quality Focus” is a monthly feature presented by SDFMC, South Dakota’s Quality Improvement Organization. For more information about the SDFMC, visit their website at www.sdfmc.org.
Rhythm of Life is a Powerful Thing

By Richard P. Holm, MD

He was a perfect specimen of health, physically fit in his mid-50s because his work and all his hunting and fishing involved a significant amount of physical activity. But this early morning he awoke with an uncomfortable chest pressure going into his neck and jaw. He arose to find no relief with stretching, a glass of milk, or anything. Finally after awakening his wife, they made their way to an emergency room where he was given merciful pain relief, and immediately tested to define if it was his heart that was causing the pain.

Not long after arriving, awaiting for test results, and as his wife was talking with him, he suddenly slipped into unconsciousness. It was there on that cold, mid-winter, South Dakota before-dawn-hour that he died, despite all the best resuscitation efforts of the emergency room team. Likely due to arterial blockage and irritable heart muscle, the symmetry of his heart rhythm had changed into one of pure chaos that wasn’t effectively pumping blood, and he just wouldn’t be converted back to normal again despite every effort. The value of rhythm is never more evident than during a cardiac arrest.

The definition of rhythm comes from Greek roots of rhuthmos (to flow) and rhyme, meaning any regular, recurring, pulsing; a succession of contrasting elements occurring over various periods of time. Think of the rhythmic experience from some speech and verse, rhyme and song, drum, and dance. There is something about rhythm that calls for symmetry, and when it is out of sync, there is a part of us that becomes uncomfortable and we are left wanting to make it right again.

It is interesting that the rhythm of walking-running gait, of breaking waves on beach, or of heart-beat-pulse, all commonly match musical sounds of Beach Boys, Beatles, Blake Shelton, Beyonce, and B.B. King, or of Simon and Garfunkel, Smokey Robinson, Stan Getz, the Supremes, and Taylor Swift.

The rhythm of life is regular, recurring, pulsing; a succession of elements over time, like the flow of seawater, fish, and animals with ocean meeting shore on an estuarial tide; the seasonal swim of salmon up a freshwater river looking for a place to spawn; the birth of lambs and calves, bursting forth on an early springtime prairie pasture or protected manger; or even the 80- to 90-year life cycle search of humans, moving with joy, sorrow, and grace, from birth to natural death.

So when a man dies too early, the rhythm is disturbed, the symmetry is out of sync, and we are left wanting to make it right again.
For those who read this column on a regular basis, you will wonder why I’m writing my “year in review” entry for the August issue instead of last month’s issue. I am impressed you caught this, but I need to provide ample time for my colleagues within Medical Management to discuss their various focus areas and initiatives which impact you and your DAKOTACARE patients. It’s hard to believe I have been employed in my role here for seven years, although our two associate medical directors (Engelbrecht and Pekas, amazing individuals of which I’m proud to work with) remind me regularly that I have well exceeded the average lifespan of a health plan CMO! Hopefully you don’t feel that my role here is stagnating. I certainly don’t. In fact, I feel my appreciation and enthusiasm for this position continue to grow. I thank many of you for your trust in my abilities to help lead this company during somewhat challenging times in this industry. There is still much to accomplish, hence part of my reason for the title of this entry.

With the passage of the “Affordable” Care Act (aka, ACA) a few years ago many health plans have felt more powerless and/or helpless to do business “as usual.” I foresee key components of this legislation hanging around for the foreseeable future, so we will make the necessary adjustments and evolve as necessary. Unfortunately the rules continue to change, so adapting means remaining nimble. DAKOTACARE is well leveraged in this area, thanks to many dedicated employees in all departments of this (your) company. We continue to work to develop internal systems which ensure our members are receiving the highest value (value = quality/cost) medical care which do not create undue burden upon you and your office staff. We have had some hits and misses here, but know our hearts are in the right place. A special thank you to all South Dakota physicians who have assisted us in these efforts via service on one of our advisory committees. Your support, feedback, and friendship have been invaluable to me.

I began a one-year fellowship program sponsored by our national health insurance trade organization (AHIP) earlier this summer, through the Kellogg School of Business at Northwestern University. Like many of you, I have never had a formal business/finance class before and hope to share many of the knowledge with you in future publications and presentations. We all have much to learn from each other and only through stronger strategic alliances between “providers” and “payers” can we make substantial progress in improving healthcare quality while keeping costs at an affordable level for South Dakota citizens.

A tragic event occurred outside our office recently which reminded me of the uncertainty of our lives. In my role attempting to assist, I felt very helpless. Related memories will probably haunt me for some time. The quick response from many employees was extremely admirable and I thank them for their caring attitude and comforting hearts to those impacted most by these events. We oftentimes hear under similar circumstances “that which does not kill us makes us stronger.” I’m not sure that’s always true, but I’m hopeful regardless. Ask me next year in July. Peace to you all!
# SDSMA PAC Membership 2014

## Chairman’s Club
* $1,000+ (Physician and Spouse)
  - Janice Knutsen
  - Roger S. Knutsen, MD
  - Karla K. Murphy, MD
  - Thomas Murphy

## Senate Club $500+ (Physician and Spouse)
  - Judy Allen
  - Robert G. Allen, Jr., MD
  - E. Paul Amundson, MD
  - Anne Barlow
  - John F. Barlow, MD
  - Jean Bubak
  - Mark E. Bubak, MD
  - Carey C. Buhrler, MD
  - Darlene Buhrler
  - Mary S. Carpenter, MD
  - Mark East
  - Dan Flynn
  - Virginia L. Frei, MD
  - Debora Frost
  - Timothy R. Frost, MD
  - Daniel C. Johnson, MD
  - Stephen M. Kovarik, MD
  - Christiane R. Maroun, MD
  - Jean McHale
  - Michael S. McHale, MD
  - Mary J. Milroy, MD
  - Stephan D. Schroeder, MD
  - Barb Smith
  - Raed A. Sulaiman, MD
  - Alison R. Tendler, MD
  - Marilyn Van Demark
  - Robert E. Van Demark, Jr., MD
  - Kevin Weiland, MD

## House Club $300+ (Physician and Spouse)
  - Benjamin C. Aaker, MD
  - Christopher J. Adducci, MD
  - Helen Adducci
  - H. Lee Ahrin, MD
  - Robbin Ahrin
  - Mike Alley
  - David W. Bean, MD
  - June Bean
  - Lynn Beasley
  - Richard L. Beasley, MD
  - Kay Berg

## House Club $300+ (Physician and Spouse)
  - Tony L. Berg, MD
  - Kevin L. Bjordahl, MD
  - Mary Bjordahl
  - Jeffrey S. Brindle, MD
  - Sherri Brindle
  - Jens Christensen
  - Rochelle Christensen, MD
  - Brook M. Eide, MD
  - Erin L. Eide
  - Tom Graslie
  - Charles E. Hart, MD
  - Kathie Hart
  - Joanie Holm
  - Richard P. Holm, MD
  - James I. Hovland, MD
  - Marie Hovland
  - Kathy Jacobs
  - Ted B. Jacobs, DO
  - Deborah Ann Kullerd, MD
  - Kaye Lawler
  - Patrick J. Lawler, MD
  - Alan A. Lawrence, MD
  - Aurie Lawrence
  - Claudette Margallo
  - Lucio N. Margallo, II, MD
  - Scott Maxwell
  - Jennifer K. May, MD
  - Karen McPherson
  - Scott A. McPherson, MD
  - Stephan J. Miller, MD
  - Janice Minder
  - Jim L. Minder, MD
  - Mary D. Nettleman, MD
  - Rodney R. Parry, MD
  - Ruth Parry
  - Marlys Porter
  - Richard I. Porter, MD
  - Herbert A. Saloum, MD
  - Linda Saloum
  - Sarah Sarbacker, MD
  - Steve Sarbacker
  - Abirami Thambi-Pillai
  - Thavam C. Thambi-Pillai, MD
  - Lisa Van Gerpen
  - Shawn D. Van Gerpen, MD
  - John C. Vidoloff, MD
  - Mary Vidoloff
  - Carol M. Zielike, MD

## Member $175+
- Robert L. Allison, MD
- P. Kenneth Aspaas, Jr., MD
- Michelle L. Baack, MD
- Jerome W. Bentz, MD
- Susan Blake
- Annette M. Bosworth, MD
- Howard W. Burns, MD
- Roger L. Carter, MD
- Martin J. Christensen, MD
- Rochelle Christensen, MD
- Wade E. Dosch, MD
- Andrew R. Ellisworth, MD
- David L. Elson, MD
- Stephen T. Foley, MD
- John R. Fritz, MD
- Heather Gehring, MD
- Kevin Gildner, MD
- Daniel J. Hafner, MD
- George W. Jenter, DO
- James Keil, MD
- James D. Kerr, MD
- Donald H. Knudson, MD
- Richard M. Little, MD
- Roxana A. Lupu, MD
- Hobart L. May, MD
- John R. Miller, DO
- John R. M. Oliphant, MD
- Michael W. Pekas, MD
- Kara Petersen, MD
- Elizabeth Reiss
- James R. Reynolds, MD
- William O. Rossing, MD
- Raymond Sherman, MD
- Eric R. Sigmund, MD
- Wayne E. Snyder, MD
- Andrew I. Soye, MD

## Member $175+
- Wesley L. Sufficool, DO
- Don DeRoy Swift, II, DO
- Ronald R. Tesch, MD
- Patrick Tibbles, MD
- Gary L. Timmerman, MD
- Kynan Trail, MD
- Victoria L. Walker, MD
- Merritt G. Warren, MD
- Grace E. Wellman
- Robert S. Wengert, MD
- Thomas C. White, MD
- Jason W. Wickersham, MD
- Gregory Wiedel, MD
- Joseph Wyatt, MD

## $100+
- A. Byford Anderson, MD
- Jeffrey Bergsaken, MD
- Amy M. Eichfeld, MD
- Michael Eide, MD
- Dennis D. Knutsen, MD
- Kevin Smith
- Sarah Jen Smith, MD
- Robert C. Suga, MD

## Resident $50+
- Sandra M. Peynado, MD
- Frank Shin, MD

## Student $25+
- MacKenzie R. Beukelman
- George A. Ceremuga
- Anthony H. Loewen
- Aron B. Merchel
- Collin T. Michels
- Jeremy P. Pepin
- Meredith A. Reynolds

---

*Your SDSMA PAC membership is very important in order to elect political candidates who share our vision. To donate to SDSMA PAC, visit [www.sdsm.org](http://www.sdsm.org).*
Fighting for You and Your Patients

The SDSMA serves as your vehicle for advocacy for your patients and the art and science of medicine through lobbying at the state and federal levels, grassroots campaigning, and legal initiatives.

The South Dakota State Medical Association Political Action Committee (SDSMA PAC) is your grassroots avenue that was created to impact public policy decisions through bipartisan political participation in all aspects of the political process. Its goal is to support and elect pro-medicine candidates on the state level. Members of the SDSMA and their spouses are eligible to join SDSMA PAC.

The SDSMA’s motto is “Values. Ethics. Advocacy.” We take our advocacy role to heart. With your help, the SDSMA and SDSMA PAC have the opportunity to dramatically impact the political and legislative process to create meaningful changes in South Dakota’s current health care system:

- Improving health and access to care in rural areas;
- Increasing Medicaid reimbursement;
- Promoting Medicare physician payment reform and stopping reimbursement cuts;
- Working to improve clinical quality and patient safety;
- Partnering with state agencies to tackle regulatory, socioeconomic, public health and scientific policy issues;
- Advocating for public health immunizations;
- Promoting adequate funding for medical education;
- Stopping inappropriate expansion of non-physician scope of practice;
- Defending the patient-physician relationship; and
- Reforming medical liability.

Visit www.sdsm.org to find out how you can become involved in our advocacy programs.

Source: SDSMA staff

“For Your Benefit” is the SDSMA’s monthly update on programs and services available to physicians through their affiliation with the SDSMA.

2015 SDSMA Member Directory – Last Call for Updates!

SDSMA staff are in the final stages of developing the 2015 Member Directory. There’s still time to ensure your personal contact information is accurately reflected in the directory. Nearly 3,000 directories are printed and distributed across the region annually and widely-referenced on a regular basis. We want your information to be accurate!

Your help is needed to ensure the photo and information listed for you in the directory is current and accurate. Please update your information today.

   2. Select Member Login at the top right-hand corner;
   3. Enter your username and password;
      a. If you do not remember your login information, select “Forgot my password” to select a new one. Enter your SDSMA-preferred email where you receive SDSMA communications.
   4. Once logged in, go to Update My Profile at the top of the page.

Form: SDSMA mailed you a document with your current information listed. Review the information and return the form by email to membership@sdsm.org or fax to 605.274.3274.

Photos: Please email a recent head shot or photo to membership@sdsm.org.

Updates must be received by Aug. 15. Those with questions about the directory or updating your information may contact Laura Olson at lolson@sdsm.org or 605.336.1965.

Source: SDSMA staff

SDSMA Member Directory a Great Advertising Opportunity

The 2015 SDSMA Member Directory is a great opportunity for organizations of all sizes to reach physicians and health care facilities through nearly 3,000 directories printed and distributed across the region. The Member Directory is widely used and often-referenced throughout the entire year, giving your organization continuous exposure.

Advertisers receive a copy of the directory which includes photographs of the SDSMA’s more than 2,000 members as well as office addresses, telephone and fax numbers, and specialties. Directories are distributed in early January.

To maximize your advertising dollars for 2015, contact Laura Olson at lolson@sdsm.org or 605.336.1965 today to secure a place for your organization’s advertisement. Ad copy is due Sept. 3. Call or email today for advertising rates, deadlines and to obtain a contract form – take advantage of this opportunity!

Source: SDSMA staff
A number of new South Dakota laws went into effect July 1.

The passing of HB 1157, which was sponsored by the SD SM A and signed by Gov. Dennis Daugaard, establishes a time-frame in which physician and provider credentialing must be completed by South Dakota’s health plans. The law requires health insurers to make retrospective payment for all clean claims submitted by a health care professional during the credentialing period. The law also requires all health insurers or other entities responsible for credentialing on behalf of the insurer to notify the applicant of its determination within 90 days of receipt of an application.

With the passage of SB 145, schools are encouraged to teach students CPR before they graduate, preparing them to respond to sudden cardiac arrest. The law recommends schools include training into health curriculum that all students would take prior to graduation. The Department of Education will provide information to school districts regarding resources and training available to assist CPR instruction as well as instructions on the use of automated external defibrillators.

Effective July 1, schools are authorized to maintain a stock of epinephrine and to administer auto-injectors pursuant to a prescription issued by an authorized health care provider for use in an emergency situation of a severe allergic reaction causing anaphylaxis. The new law requires school boards to adopt a policy related to the use and storage of epinephrine auto-injectors and requires schools to notify parents or guardians of students about the policy.

A statewide texting while driving ban went into effect July 1; those caught texting and driving can receive a ticket. The law makes texting and driving a secondary offense, which means a driver would have to be pulled over for another violation before receiving a texting while driving ticket. The fine for texting while driving is $100. Local ordinances may allow for primary enforcement and come with higher penalties. South Dakota is the 42nd state to put a ban on texting while driving.

As of July 1, organizations that place children for adoption are excluded from being a registered pregnancy help center. Additionally, the law now requires registered pregnancy help centers to report information about their counselors every year so the state can confirm the counselors are licensed. Of note, South Dakota law already prevents abortion providers from registering as a pregnancy help center.

Effective July 1, the performance of sex-selective abortions based on the fetus’ gender is illegal. Physicians who perform such an abortion could be charged with a Class 6 felony under the new law. South Dakota is the eighth state to ban sex-selective abortions.

Source: LRC and SDPB

Reporting Child Abuse

Physicians and other health care professionals are required to report suspected child abuse or neglect and are granted immunity for both making the report and participation in further investigation.

The HIPAA-mandated privacy rules specifically authorize child abuse or neglect reports. If the suspected abuse or neglect is discovered in the physician’s clinic, the physician is obligated to immediately make an oral report to the state’s attorney, the South Dakota Department of Social Services, or to law enforcement. If the suspected abuse or neglect is discovered in a hospital setting, the physician must report the discovery to the person in charge of the institution or that person’s designee. The person in charge must then report the discovery and provide copies of all medical examination, treatment, and hospital records regarding the child. Those who knowingly fail to make the required report and submit the required records are guilty of a Class 1 misdemeanor.

The physician-patient privilege of confidentiality does not exist in any judicial proceeding involving an alleged abuse or neglected child or resulting from the giving or causing the giving of a report concerning abuse or neglect. Any person who makes a report of child abuse is immune from civil or criminal liability. Immunity also extends to the participation in any judicial proceeding resulting from the report of suspected abuse or neglect.

For more information, download the SDSMA legal brief Reporting Child Abuse at www.sdsm.org. Through the SDSMA Center for Physician Resources, the SDSMA develops and delivers programs for members in the area of practice management, leadership and health and wellness.

Source: SDSMA staff
AMA Annual Meeting Focuses on Embracing Change

A delegation of SDSMA leaders attended the American Medical Association (AMA) Annual Meeting of the House of Delegates (HOD) June 7-11 in Chicago. The HOD is the legislative and policymaking body of the AMA, composed of elected representatives and others. AMA Delegate Herb Saloum, MD, along with SDSMA President Mary J. Milroy, MD, and SDSMA CEO Barb Smith attended the meeting. Medical students Teresa Maas and Collin Michels attended as part of the South Dakota delegation. Maas is an alternate delegate to the Medical Student Section for Region 1.

Maryland reproductive endocrinologist and OB-GYN Robert M. Wah, MD, assumed the AMA presidency. The 169th president of the AMA, and the first Asian American to hold the post, Dr. Wah emphasized in his inaugural address both the importance of tradition and the courage to embrace change.

Critical Access Hospitals
Among the new policies adopted by the HOD was a resolution drafted by South Dakota regarding critical access hospitals (CAHs). President Obama’s budget called for cuts to CAHs’ Medicare reimbursement and elimination of the designation affording cost-based payment for facilities within 10 miles of any hospital, regardless of whether the nearby hospital is capable of providing the services that would be lost if the CAH closed. These cuts would be detrimental to CAHs in South Dakota and throughout the country — impeding their ability to provide high-quality care. CAHs play a vital role in providing access to health care, economic security for families and seniors, and jobs to rural communities across the nation. These hospitals provide inpatient and outpatient services, as well as 24-hour emergency care and make it possible for patients with complex medical needs to remain at home in rural communities.

The new resolution calls on the Centers for Medicare & Medicaid Services to support individual states in their development of rural health networks and opposes the elimination of the CAH necessary provider designation, and asks that the federal government fully fund its obligations under the Medicare Rural Hospital Flexibility Program. The SDSMA worked to bring additional states on board in support of the resolution — Iowa, Minnesota, Nebraska, North Dakota and Wisconsin. After a committee referred this issue for further study, SDSMA members spoke against referral at the HOD, and the testimony led to voting against referral and the resolution passed on the HOD floor.

Quicker Care for Veterans
Physicians voted to ask President Obama to provide timely access to entitled care for eligible veterans via the health care sector outside of the VA health care system until the VA can provide health care in a timely fashion. The new AMA policy also directs the AMA to urge Congress to quickly enact long-term solutions so eligible veterans always can have timely access to entitled care. The policy came in response to recent access-to-case problems that have left thousands of veterans unable to receive care in a timely fashion.

Telemedicine
A new telemedicine policy was passed that lays out principles for coverage and payment. The HOD approved a set of principles to ensure the appropriate coverage of and payment for telemedicine services. The principles aim to support future innovation in the use of telemedicine while ensuring patient safety, quality of care and the privacy of patient information, as well as protecting the patient-physician relationship and promoting improved care coordination and communication with medical homes.

The policy reiterates the importance of national medical specialty societies continuing to be involved in the development of appropriate and comprehensive practice parameters, standards and guidelines to address the clinical and technological aspects of telemedicine. Delegates also called for a study of the issues associated with the state-based licensure and the portability of state licensure for telemedicine services.

e-Cigarette Regulation
A new policy was adopted that opposes the sale and marketing of electronic cigarettes and nicotine delivery products to minors. The new policy extends existing policy that calls for all e-cigarettes to be subject to the same regulations and oversight that the Food and Drug Administration applies to tobacco and nicotine products. The use of e-cigarettes by students in U.S. middle schools and high schools more than doubled from 3.3 percent in 2011 to 6.8 percent in 2012, according to the Centers for Disease Control and Prevention.

Electronic Data Interchange
New policies adopted call for changes to health IT. The policies include directing the AMA to work with the federal government and electronic health record (EHR) vendors to establish a process to achieve data exchange. One policy addresses “data lock-in,” in which information stored in one EHR system cannot easily be transferred to another system. Another policy calls for the AMA to engage the EHR vendor community to secure changes to their systems that would better meet physicians’ practice needs.

Submitted by Herb A. Saloum, MD, delegate to the AMA
Member News

Webinar will Focus on Effective Patient Communication

The SDSMA Center for Physician Resources invites you to its free webinar, “A Physician’s Guide to Effective Patient Communication” at 7 p.m. CT on Thursday, Aug. 21.

Whether you’re a medical student, a young physician just out of residency, or you’ve been actively practicing medicine for five, 10 or 15 years, it’s important to know how to protect yourself against liability claims by identifying and mitigating risk in your clinical practice.

This webinar will provide information on:

- How a patient’s perception of quality is based on the provider’s ability to effectively communicate;
- Avoiding communication pitfalls that can lead to a medical liability claim; and
- How the health care team as a whole plays a role in effective patient communication.

To register for this WebEx webinar, visit www.sdsm.org. The calendar along the right side of the page provides registration links.

Source: SDSMA staff

SDSMA Center for Physician Resources

Wealth Integration Forums

The SDSMA Center for Physician Resources invites you to its Wealth Integration Forum taking place from 3-7 p.m. Sept. 9 in Sioux Falls and Sept. 16 in Rapid City. Session topics include:

- Asset and wealth protection;
- Tax strategies for 2014 and beyond;
- Developing a plan for retirement; and
- Physician payment models of the future.

To register for these events, visit www.sdsm.org and find a link to register on the right-hand side of the homepage. To register, you must be logged in. If you cannot remember your password, you can retrieve it using the steps on the website. When retrieving a forgotten password or setting up an account, please use your SDSMA-preferred email account (the email in which you receive SDSMA communication). A password reset link will be sent to that email address.

Don’t miss these events! Register today at www.sdsm.org or call 605.336.1965.

Source: SDSMA staff

Is South Dakota medicine In Your Advertising Budget?

If not, contact us to reach over 2,000 physicians!

CONTACT:
Elizabeth Reiss, South Dakota Medicine
PO Box 7406, 2600 W. 49th Street, Suite 200
Sioux Falls, SD 57117-7406
605.336.1965
E-mail: ereiss@sdsm.org
A CENTER FOR PHYSICIAN RESOURCES PRESENTATION

From the SDSMA Center for Physician Resources, the fourth of six programs designed to offer physicians information on mitigating risk in clinical practice. This educational program is being offered as part of the Center’s Practice of Medicine education series and is not a sales presentation.

Register now for this important webinar!
“A Physician’s Guide to Effective Patient Communication”
Thursday, Aug. 21, 2014 • 7 p.m. CT

Free registration for any SDSMA member and a guest.
To register, visit www.sdsma.org.

Whether you’re a medical student, a young physician just out of residency, or you’ve been actively practicing medicine for 5, 10 or 15 years, it’s important to know how to protect yourself against liability claims by identifying and mitigating risk in your clinical practice.

The SDSMA Center for Physician Resources invites you to “A Physician’s Guide to Effective Patient Communication,” which will provide information on:

- How the patient’s perception of quality is based on the provider’s ability to effectively communicate
- Avoiding communication pitfalls that can lead to a medical liability claim
- How the health care team as a whole plays a role in effective patient communication

Note: Upcoming programs will include topics such as patient handoffs and the utilization of mid-level health care providers.

Presenter: Robert S. Thompson, RT, JD, MBA, serves as the Director of Education at MMIC. Mr. Thompson has a diversified background in law, medicine, medical professional liability insurance and health care risk management. Mr. Thompson specializes in patient safety, risk management and health care communication.

This Event is sponsored by

MMIC
Finding more information about the QuitLine just got a whole lot easier.

Just visit our website at www.SDQuitLine.com and click on the Providers tab. We have an entire section designed specifically to help you answer all your patients’ QuitLine questions.
CME Events

Continuing Medical Education events which are being held throughout the United States (Category 1 CME credit available as listed)

**August 2014**

Aug. 7-8
Mucha Symposium: Meeting the Needs of the Acute Care Surgery and Injured Patient
AMA PRA Category 1 Credit(s)™ available
Register online: www.mayo.edu/cmee

Aug. 8
Effective Clinical Management of Borderline Personality Disorder
AMA PRA Category 1 Credit(s)™ available
Register online: www.mayo.edu/cmee

Aug. 13
Surgery/Trauma Grand Rounds: hidradenitis
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Aug. 27
Cardiovascular Disease in Women
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Aug. 27
Transforming Behavior and Culture at Work: Who Heals the Healer
AMA PRA Category 1 Credit(s)™ available
Register online: www.mmicgroup.com/risk-management/webinars

Aug. 29
VA Medical Center CME Activity: Skin/Wound Care
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

**September 2014**

Sept. 17
Indications and Techniques of Neck Dissection
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Sept. 18
Pediatric Grand Rounds: Rapid Testing of Influenza
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Sept. 18-19
Mayo Clinic Nutrition and Wellness in Health and Disease
AMA PRA Category 1 Credit(s)™ available
Register online: www.mayo.edu/cmee

Sept. 24
Internal Medicine Grand Rounds: Management of Pulmonary Nodules
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Sept. 25
Pediatric Grand Rounds: Oncofertility
AMA PRA Category 1 Credit(s)™ available
Register online: www.mayo.edu/cmee

Sept. 26
VA Medical Center CME Activity: Suicide Prevention
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

**October 2014**

Oct. 1
Internal Medicine Grand Rounds: Management of Urinary Incontinence
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Oct. 8
Internal Medicine Grand Rounds: Treatment of Varicose Veins
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Oct. 31
VA Medical Center Activity: Nutrition Support Program
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

**November 2014**

Nov. 5
Dispelling the Myth: Cyber Risk Is Not a Technology Problem
AMA PRA Category 1 Credit(s)™ available
Register online: www.mmicgroup.com/risk-management/webinars

Nov. 21
VA Medical Center Activity: What's New in Integrative Medicine?
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

**December 2014**

Dec. 10
Internal Medicine Grand Rounds: Treatment for Bipolar, ADD, Depression, Anxiety
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

Dec. 17
Laparoscopic Colectomy for Colon Cancer
AMA PRA Category 1 Credit(s)™ available
Register online: www.usd.edu/cmee

**DO YOU HAVE A CME EVENT COMING UP?**

**WOULD YOU LIKE TO HAVE IT LISTED HERE?**

Contact: Elizabeth Reiss,
South Dakota Medicine,
2600 W. 49th Street, Suite 200,
Sioux Falls, SD 57105
Phone: 605.336.1965
Fax: 605.274.3274
Email: ereiss@sdsm.org
Physicians needed for Saturday physicals in Sioux Falls, SD. Payment is $1,000 per day. All dates are scheduled a month in advance and can vary month to month depending on the physician's schedule. We provide an office, staff, forms, brief training, electronic medical record or transcription service and malpractice coverage. If interested or would like more information contact Dr. Fox at 443-838-1168 or CEFox@medplusdisability.com
Thank you for putting the ‘CARE’ in DAKOTACARE

In 1986, the physicians of our state created DAKOTACARE because they believed a health care plan should be locally owned and directed. Today, DAKOTACARE continues to improve on making healthcare coverage and services provided by South Dakota physicians a seamless process.

Your involvement is critical to making DAKOTACARE a success. Many South Dakota physicians are currently participating through various committees, work groups or in other capacities, helping to guide the business decisions of our organization. DAKOTACARE’s Medical Management Department, staffed with knowledgeable physicians, pharmacists and nurses work with you to provide quality health care to your patients.

Your ownership and insight puts the “care” into DAKOTACARE.
Looking for a better way to manage risk?
Get on board.

At MMIC, we believe patients get the best care when their doctors feel confident and supported. So we put our energy into creating risk solutions that everyone in your organization can get into. Solutions such as medical liability insurance, physician well-being, health IT support and patient safety consulting. It’s our own quiet way of revolutionizing health care.

To join the Peace of Mind Movement, give us a call at 1.800.328.5532 or visit MMICgroup.com.