SHC Community Health Needs Assessment

Contributors: Charles Lobeck, Administrator; Terri Kasbohm, Director of Patient Care; Helen Robinson, Director of Health Information Services; Mary Eichmiller, Director of Inpatient Care Unit; Maureen Johnson, Director of Child Life and Alison Fox, Patient Care and Development Assistant
Mission

- Provide the highest quality care to children with neuromusculoskeletal conditions and certain other special healthcare needs within a compassionate, family-centered and collaborative care environment.
- Provide for the education of staff, physicians and other healthcare professionals.
- Participate in clinical research that improves the quality of care and quality of life of children and families.

This mission is carried out without regard to race, color, creed, sex or sect, disability, national origin or ability of a patient or family to pay.

Vision

- Shriners Hospitals for Children-Twin Cities aspires to provide the highest quality pediatric orthopaedic care in a family-centered, compassionate environment. We are committed to working together for the benefit of the patient and family, to prudently using our resources, and to continuously improving all that we do. We seek to provide the finest pediatric orthopaedic health care in our service area.
Table of Contents

Our Commitment to the Community .......................................................... 4
Process and Methods .................................................................................. 10
Key Findings ............................................................................................... 19
Walking the Talk......................................................................................... 21
Acknowledgements ..................................................................................... 25
Our Commitment to the Community

Twin Cities Hospital Overview

Shriners Hospitals for Children — Twin Cities is one of 22 Shriners Hospitals. Shriners Hospitals for Children — Twin Cities has been providing specialized, high quality care to children with orthopaedic conditions for 90 years. The other Shriners Hospitals for Children are located throughout the United States, Canada, and Mexico.

Shriners Hospitals for Children — Twin Cities is located in the Minneapolis-St. Paul community. There are 40 licensed inpatient beds. In addition, perioperative, outpatient clinic, rehabilitative, orthotic and prosthetic, nutrition, radiology, child life, lab and other supporting services are provided to children and their families. Specialized pediatric care is provided by expert orthopaedic medical and allied health staff with a focus on family centered care, innovation, education, and research.

The main purpose of the Shriners Hospital for Children — Twin Cities Hospital is to provide care for children with a wide variety of orthopaedic conditions. Conditions treated at the Twin Cities Hospital include:

- Conditions of the upper and lower extremities,
- Spinal anomalies
- Limb deficiencies
- Arthrogryposis,
- Cerebral palsy
- Hip problems
- Juvenile arthritis
- Rickets
- Spina bifida
- Neurological disorders
- Brittle bone disease
- Genetic anomalies
- Specialized plastic surgery

All of the specialized orthopaedic care and services are provided without regard to race, color, creed, sex, sect, disability, national origin or ability of a patient or family to pay, financial status and/or insurance coverage. A family centered care model is utilized which supports the child within the family and the family within the community. With specialty trained and highly qualified pediatric orthopaedic surgeons, pediatricians, anesthesiologists, nurses, and a comprehensive team of physical,
occupational, speech and other therapists, Shriners Hospital for Children Twin Cities is able customize care for each child based on his or her overall health needs and medical conditions.

Shriners Hospitals for Children-Twin Cities’ catchment area includes 7 U.S. states, as well as 3 Canadian Provinces (see figure 1).

**Figure 1 Shriners Hospitals for Children-Twin Cities Catchment Area**

Due to its large catchment area, Shriners Hospital for Children-Twin Cities provides a community service by offering free off-premise clinics and screening clinics in communities which are a significant distance from the hospital. An off-premise clinic consists of a team of 7-8 staff members traveling out of state to see 20-90 children over a 1-2 day period. Screening clinics consists of annual staff trips to as many as 25 different sites to screen children who may have orthopaedic conditions. Staff let families know whether it is likely that their child’s condition can be treated at Shriners. Both the
off premise and screening clinics were established over 20 years ago as a community service to provide family centered, pediatric orthopaedic care closer to where patients live.

With changes in the health care community and our system, Shriner’s leadership has identified the increased need not just to provide direct care service, but to build strong referral networks with local health care providers. By increasing relationships with local physicians Shriner’s Hospitals for Children — Twin Cities can increase access to care for pediatric patients with orthopaedic conditions. Actions that have been taken in 2013 to strengthen physician referral networks have included:

1. Increasing communication with existing referring partners and the introduction of a new physician referral phone number
2. Visiting family physicians and pediatricians in the Twin Cities area-and explaining what SHC — TWI does and how to initiate a referral.
3. Increasing exposure with professional groups such as the MN Chapter of American Academy of Pediatricians by placing a new ad in their quarterly newsletter and attending medical conferences or holding a booth
4. Developing new marketing materials that include the referral information
5. Launching a search engine marketing program
6. Involving local physicians in off premise and screening clinics.

Prior to 2011, Shriners Hospital for Children provided all care at no charge to the patient or family through an endowment fund. It was not until 2011 that Shriners Hospital began to participate in a revenue cycle. Shriners’ unique history as a philanthropic hospital has allowed many special services to be provided that meet the needs of the whole child, but would not be reimbursable through insurance. Examples of non-reimbursable community services are camps for children who are limb deficient, or who have spina bifida, or are learning adaptive swimming, proms, or camp real world for patients aging out of the Shrine system. Many children with orthopaedic conditions may not have the opportunity to participate in physical activities in their home communities. The camps assist children learn how to have and how to advocate for a healthier life style, in addition to being provided at no cost to the patient and/or family.

- Swimming camp is one example. The Rehabilitation Department partners with Foss Swim School to provide one on one attention, so that children of all abilities are able to learn, grow, and develop confidence in the water. This camp not only teaches a lifelong skill, but also builds confidence and friendships.
• Camp Achieve assists children who are limb deficient to have fun while learning new skills, such as horseback riding, trout fishing, kayaking, snow shoeing, skiing. These skills and the friendships that develop during camps nurture the spirit of the whole child and their families.

• Shriners Hospital for Children — Twin Cities partners with Sanford Health System for Spirit Camp which grants patients with Spina Bifida the opportunity to experience nature in a camp setting.

• A final example, although there are many more to draw from, is the annual Twin Cities prom. This event held at the local Bloomington, MN masonic lodge involves music, dancing and fun for all. Patients who are registered for the prom receive a complimentary dress or tux, make-up, and hairstyling from local organizations willing to donate time and supplies.

Shriners Hospitals for Children has a long history of partnering with other health care providers in the community to enhance services provided for children with orthopaedic conditions. Specialists from Mayo Clinic, University of MN-Fairview, Gillette, and St. Paul Radiology regularly provide care at Shriners. In 2013 Shriners Hospitals for Children — Twin Cities joined the Mayo Clinic Care Network. This affiliation provides easy access to expert advice on line and expands an already strong relationship. In addition, community partnerships with organizations such as Courage Center, Hennepin County Medical Center, Children’s, the MN Department of Health, Team Ortho, and many others strengthens Shriners participation in the community and enhances what Shriners is able to offer.

In addition to reviewing what the unmet health care needs of the community are Shriners Hospitals routinely solicits family feedback, suggestions for improvement through Press Ganey surveys and continuously monitors the needs of our patients and families.

Towards the end of 2012, Shriners Hospitals for Children — Twin Cities began the process of conducting a community health needs assessment (CHNA).

• The needs assessment process included the following goals:
  • To evaluate and identify the health needs within our community
  • To enhance community engagement and collaborative efforts
  • To establish accessible community involvement programs

Figure 2-Source of SHC—TWI Patients by State- Internal Primary Source Data
Metro includes: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties. *
As can be see from Figure 2, the majority of Shiners Hospitals for Children —Twin Cities patients come from the metropolitan area of MN.

Shriners Hospitals for Children - TWI 2012 Patient Origins

For purposes of the community health needs assessment (CHNA) it was determined by Twin Cities leadership that “community” should be defined as the area encompassing the majority of patients. A frequency distribution of primary source patient demographic data year end 2012 demonstrated that the highest concentration of patients comes from the MN metropolitan area. The next largest share of the population derives from the greater MN area. Therefore, for purpose of the community health needs assessment the primary service area is defined as the MN metropolitan area,
while the secondary service area is the entire state of MN. See Exhibit 1 for demographic snapshot of the Twin City area.

Secondary data from a variety of sources was reviewed to determine the highest priorities for children’s health care in MN. Significant emphasis was placed on an analysis done by the MN Department of Health (MDH). The MN Department of Health identified (1.) obesity and (2.) commercial tobacco use as the highest priorities for the public health of MN. Shriners Hospitals for Children is a smoke free campus, so the greatest opportunity to address an essential community health need was in the area of obesity prevention. In addition to the MN Department of Health conclusions, a 2010 MN needs assessment for children with special health care needs was reviewed. A comprehensive methodology was used in conducting the children with special health care needs assessment in order to insure the accuracy of the needs assessment as part of the Title V Block Grant process. A wide variety of stakeholders were surveyed by MN Children and Youth with Special Health Care Needs (MNCYSHCN) to determine priority focus areas. Since the patient base of the SHC — TWI includes children and youth with special health care needs, it made sense to utilize and incorporate the findings of the MN Children and Youth with Special Health Care Needs (MNCYSHCN) group.

After reviewing the list of health care priorities for children and teens in MN, Shriners Hospitals for Children — Twin Cities elected to incorporate the need for healthy eating and increased physical activity into the orthopedic services provided, since these issues are the closest match to SHC — TWI orthopedic scope of service. The well documented and growing problems with childhood obesity in MN and in the US make this a topic of high importance. Since children with orthopaedic impairments have even greater challenges in finding suitable physical activities to maintain an appropriate body mass and fitness level, it was agreed that promoting healthy nutrition and appropriate activity should be a high priority for assessment and intervention for Shriners Hospital for Children — Twin Cities.

The focus of this community needs assessment is therefore overweight and obese children (defined as a BMI percentile equal to or greater than 85% for age and weight) with orthopedic conditions in the metropolitan area (primary service area) or in greater MN (secondary service area). Preliminary data and literature suggests that the obesity compounds the problems and complications experienced by children with orthopedic conditions. Two of the three patients who were readmitted to Shriners Hospitals for Children — Twin Cities within 30 days in 2012 had BMI percentiles greater than the 99th percentile. The numbers of patients are small, so it is hard to draw firm conclusions. The variable of BMI percentile warrants continued monitoring.

There has been a notable increase in children presenting to Shriners over the last 6-7 years with Blount’s Disease and slipped capital epiphyses. Children who are overweight and obese are at greater risk for long term health problems such as hypertension, hyperlipemia and type 2 diabetes, as
well as social difficulties within peer groups. Focusing on overweight and obese children with orthopedic problems allows Shiners Hospitals for Children to better use our resources with children who are already receiving specialized orthopedic care at our facility, as well as to recruit new patients who may have both an orthopedic and obesity problem.

**Process and Methods**

**Establishing a clear understanding**

The Patient Protection and Affordable Care Act of 2010 require hospitals to conduct a community health needs assessment every three years, and to develop written strategies to meet the identified needs. Shriners’ Corporate Office led the initiative by assisting individual Shrine Hospitals to conduct their community health needs assessments. Beginning at the end of 2012 and continuing through June, 2013 weekly conference calls were held for all Shrine Hospitals representatives working on CHNAs. Conference calls were designed to assist with the successful completion of each individual’s hospital CHNA. Corporate staff compiled data related to individual hospital’s catchment area and health care population. A template for writing the CHNA was provided, milestones to insure successful completion of the CHNA were established and individual help and consultation was made available.

The Twin Cities hospital approached this assessment as an opportunity to assess the health care needs of pediatric patients in our community and determine how our specialized services could help address those health care needs. The Shriners Hospitals for Children —Twin Cities’ administrative team decided to use a variety of internal resources in order to complete the community health needs assessment. The Administrator, Administrative Assistant for Donations and the Director of Patient Care Services/ Performance Improvement was the primary staff members responsible for assessing the health care needs of the community. Significant support was also provided by the Directors of Health Information Management, Information Services, Inpatient Services, Rehabilitation, Research, Outreach, Nutrition Services and Child Life. Updates on findings and progress on the community health needs assessment were shared monthly beginning in February, 2013 with the Medical Staff, Patient Safety Committee, Health and Wellness Committee, and Performance Improvement Committee of the Twin Cities Board of Governors.

Being a specialized and small hospital, Shriners Hospitals for Children —Twin Cities has limited resources for data gathering, analysis and writing. This reality impacted the decision about how to manage the CHNA. The Minnesota’s community has many healthcare facilities. See Exhibit 2 for a listing of some but not all of the pediatric resources in the Twin Cities area. On May 31, 2013 the Minnesota Chapter of the American Academy of Pediatricians presented an all-day work shop on
pediatric obesity and encouraged best practice for treatment. Many community pediatric providers were in attendance. Shriners Hospitals for Children — Twin Cities sent a multidisciplinary team to the conference. Data regarding the health needs of the community is readily available. The Shriners Hospitals for Children — Twin Cities CHNA team reviewed external and internal data. A decision was made by the SHC — TWI CHNA team to manage the CHNA internally and to use secondary sources of data provided by other organizations for the following reasons:

1. Outside sources have an abundance of data publically available for use
2. We have qualified staff to accurately and acutely manage the CHNA
3. Our hospitals mission and vision are very unique compared to others and limit what community health needs we can address within our scope of service

The MN Department of Health (MDH) in the opening statements of the Statewide Health Improvement Program reports that MN two biggest health problems in MN and nationally are obesity caused by poor nutrition and insufficient physical activity and commercial tobacco use (http://www.health.state.us/divs/oshii/ship/ retrieved on 12/26/2012. In a June, 2012 fact sheet titled Children and Adolescents Overweight the MDH reports the incidence of obesity among youth has tripled in the last 28 years. Increasing numbers of overweight (defined as a body mass index (BMI) equal to or greater than the 85th percentile), and obese (defined as equal to or greater than the 95th percentile) children are being reported at all age levels. See Figure 3

**Figure 3**

<table>
<thead>
<tr>
<th>Children and Adolescent Overweight Fact Sheet Updated June 2012 by MN Department of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010-MN</strong></td>
</tr>
<tr>
<td>9th grade males</td>
</tr>
<tr>
<td>9th grade females</td>
</tr>
<tr>
<td>12th grade males</td>
</tr>
<tr>
<td>12th grade females</td>
</tr>
<tr>
<td>WIC- enrollees aged 2-5</td>
</tr>
</tbody>
</table>

Shriners Hospitals for Children — Twin Cities felt as a specialty hospital dealing with orthopedic conditions that it could make the most significant contribution in the area of nutrition and physical activity. This matched the high level of priority this item received through the Title V block grant needs assessment process. All of the items on the list are important. The admission intake assessment touches briefly on each of these topics. The issue of insurance was identified as the highest priority on the MNCYSHCN assessment. Insurance coverage is not a problem for services provided at Shriners’ Hospitals for Children — Twin Cities. Care within the building is provided regardless of patient/family ability to pay. If the family expresses a hardship in paying co-pays and deductibles, assistance can be provided. Multidisciplinary staff members work with families to make appropriate referrals for items on the list that are beyond the scope of Shriners Hospital. Examples of referrals that would be made outside of the building include services related to mental health, child abuse, pregnancy, alcohol and drug use, and school readiness. Because Shriners Hospital for Children — Twin Cities is a specialty hospital, it is important that SHC — TWI refers children back to their primary care provider and medical home for continued care and follow-up on non-orthopaedic issues. The Minnesota Department of Health and the Minnesota Department of Education have been an outstanding source of qualitative and quantitative data.

As a result of the CHNA the Twin Cities Shriners Hospital decided to focus on overweight and obese orthopaedic children. The children with orthopaedic and neuromusculoskeletal conditions served by SHC — TWI have different and possibly more factors that can negatively affect weight and fitness. Through a comprehensive multidisciplinary team approach to addressing obesity in our hospital, we hope to discover what factors would be motivating to overweight and or obese patients and their families in making life style changes that could be life-saving.

**Shriners Hospitals for Children — Twin Cities Data:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Survey Ranking</th>
<th>Average Prioritization Score</th>
<th>Average Weighted Prioritization Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>1</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Comprehensive well baby/child care</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Infant and child developmental,</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>social and emotional screening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insurance</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nutrition and physical activity</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Child abuse and neglect</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Teen pregnancy</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Alcohol and drug use</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Healthy youth development</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>School readiness</td>
<td>10</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Shriners Hospitals for Children — Twin Cities reviewed the charts of 723 patients who were treated at SHC — TWI during October 2012. There were 19 inpatients, 612 outpatients, 60 off-premise clinic patients, and 32 outpatient surgery patients treated. From the 723 total patients treated, a random sample of 121 patients (17%) was selected for further analysis. See Figure 5.

**Figure 5**

![SHC-TWI October, 2012 All Patients](chart)

Out of the 121 randomly sampled patients 25 of those patients (20%) were at or above the 85th percentile for Body Mass Index (BMI). BMI for a child or teen (0-18) is a number calculated by date of measurement, birthdate, gender, height, and weight according to the Center of Disease Control and Prevention. A BMI in the 85th percentile is categorized as overweight, and the 95th percentile is categorized as obese. Through the data gathered we found out of the 25 patients surveyed 11 were female and 14 were male. The survey also found that 3 out of the 25 patients (12%) were wheel-chair bound. Since poverty has been linked to obesity we thought it would be useful to look at insurance status as a proxy indicator of socioeconomic status. We found that 6 of the overweight patients (24%) were uninsured and an additional 4 of those 25 patients (16%) were on Medicaid. A specific diagnosis of overweight or obesity was found in 13 (11%) out of the 121 sample charts. When the actual growth and BMI charts of all the 121 patients were reviewed it was revealed that 25 (20%) of the 121 patients had a BMI which could be categorized as overweight or obese. Only two nutrition consults were ordered out of the 25 sample patients found to be overweight or obese. Out of those two patients only
one consult order was completed. From the 25 patients that were either diagnosed or had a BMI in the 85th percentile or higher there was only one patient who had a nutrition consult charted and completed for the overweight or obese diagnosis. See Figure 6.

Figure 6

The reason for this apparent disparity was attributed to the orthopaedic specialty nature of hospital. The question arises about how much impact an orthopaedic hospital can have on a chronic problem such as the weight management and activity levels of their patients. The overall fitness level of SHC-TWI patients ultimately impacts their orthopedic condition and vice versa. It was agreed that SHC — TWI will need to work in partnership with our patients’ medical homes to address their overall nutrition and fitness level, but that SHC —T WI must as part of its community service participate in a dialogue with at risk children and their families about nutrition and fitness. As evidenced in the following graph most (40%) of the sample patients who are overweight or obese come from Minnesota. See Figure 7.
This finding supports SHC—TWIs intent to limit the CHNA to the primary and secondary service area in MN. The finding of a majority of overweight children being from MN is advantageous for providing special programming aimed at improving health and wellness offered at this hospital. SHC—TWI is accessible to the majority of the patient population most in need of nutrition and fitness programming.

Blount disease has been widely stated to be caused by excessive weight pushing on the growth plate. Blount disease is a growth disorder of the tibia that causes the lower leg to angle inward, resembling a bowleg. We searched our database to see if the number of patients seen at our hospital with this disease had increased over the years due to the increase of overweight and obese children. We found that from 2007-2009 forty-five of our patients had a diagnosis of Blount disease and 2010-2012 fifty-five had a diagnosis of Blount disease. Over a five year period there has been a 22% increase in the number of patients treated with Blount’s disease at our hospital. Part of the action plan will be to verify and scrutinize this data more carefully to see what additional patterns or trends may emerge.

Outside Resources

Qualitative Data

The number of overweight children has increased at an alarming rate. The increasing rate of overweight children places them at greater risk for development and early onset of a wide variety of chronic diseases and health conditions during adulthood. As noted in the MN Department of Health Fact Sheet, 2012 “overweight children are at higher risk of experiencing risk factors such as: hypertension, hyperlipidemia, and type 2-diabetes, once seen only in adults. This is of concern since
the majority of overweight children are overweight or obese in adulthood, placing them at increased risk for a number of health conditions, such as: coronary heart disease, stroke, depression, anxiety, osteoarthritis, sleep apnea, some cancers, and gallbladder disease. The economic impact of overweight and obesity includes direct and indirect costs. Direct costs include medical costs classified as preventive, diagnostic, and treatment. Indirect costs include morbidity and mortality costs such as lost productivity, absenteeism and premature death.” The Minnesota Department of Health has concluded that an overweight and obese population is a community problem that needs focus. Obesity is one of the most serious public health concerns facing the nation and Minnesota today. See Figure 8.

**Figure 8 - from MN Department of Health - Total MN Population Increase in Obesity**

The above graph depicts the MN population at large. It is often observed that where children are overweight and obese, frequently the same is true for the parents. Many factors that influence health are modifiable. By one estimate, more than three quarters of all deaths in the United States can be attributed to tobacco use, poor diet and physical inactivity. Preventing and managing chronic disease by modifying health risk behaviors ultimately helps people live longer, healthier lives and keeps health care costs down for individuals and families.

The CDC (2008) points to national data demonstrating young people are becoming progressively less active. Nationally 35% of high school students participated in any kind of physical activity that increased their heart rate and made them breath hard some of the time for a total of at least
60 minutes on 5 or more days of the past seven days. In 2007, only 30% of high school students participated in daily physical education classes compared with 42% of students in 1991. Participation in physical activity declines, as children get older. Ninth graders, 38%, are significantly more likely to be participating in regular physical activity than twelfth graders, 30%. Boys are more physically active than girls. Approximately 44% of boys and 26% of girls participated in regular physical activity. Nationwide, 35% of students watch television more than 3 hours during an average school day. Overall, White students, 27%, were less likely than Hispanic, 43%, or African American students, 63%, to watch television three or more hours per school day.

**Quantitative Data**

Student surveys conducted in MN schools and summarized by the MN Department of Health reveal startling facts about the current health habits of MN students (Health of MN: Parts One and Two). See Figure 9. The best case scenario is that only 19% of MN 9th graders are getting 5 servings per day of fruit and vegetables.

**Figure 9**

![Chart showing fruit and vegetable consumption](chart.png)


Figure 10 demonstrates a study done by the Health Promotion and Chronic Disease Division at the Minnesota Department of Health.
Eating a diet with sufficient fruits and vegetables is a problematic for 80% of youth. The focus on healthy habits has resulted in increased levels of physical activity (see Figure 11), but still 26% of boys and 62% of girls are not getting enough exercise. The home is where most life style behavior is first learned. With only 38% of the adult population at a healthy weight, it is not hard to understand why the children are having difficulty with these behaviors. The WIC data presented in Figure 12 shows dramatic numbers of young children between the ages of 2-5 who are overweight and obese. Habits developed this young will be extremely difficult to reverse. While the problem crosses all races, there are significant racial disparities, which will impact long term health and wellness.

Figure 12  

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Overweight (85th to 94th percentile) And Obese (95th percentile and above)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>26.0%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>26.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>35.9%</td>
</tr>
<tr>
<td>American Indian</td>
<td>50.9%</td>
</tr>
<tr>
<td>Asian and Pacific Islander</td>
<td>32.8%</td>
</tr>
<tr>
<td>Multiple Races</td>
<td>31.6%</td>
</tr>
</tbody>
</table>


**Key Findings**

**Where do we go from here?**

This process has been enlightening not only to the group of staff working on the CHNA but to the entire staff at our Twin Cities hospital. Results of the CHNA, literature review and work of the obesity task force have been presented to staff at journal club and a hospital staff weekly conference. Unfortunately, there are only a limited number of articles addressing the special needs of children who are overweight or obese with orthopaedic or neuromusculoskeletal conditions. In an article, Diseases Associated with Childhood Obesity, by Arabinda K. Choudhary, Lane F. Donnelly, Judy M. Racadio, and Janet L. Strife (2007) mention a few musculoskeletal disorders that are seen on a regular basis at Shriners Hospital for Children-Twin Cities. One of the disorders presented is slipped capital femoral epiphysis (SCFE), which is a hip disorder in adolescents that causes symptoms of hip or knee pain. Another disorder mentioned is Blount disease which can be a result of overweight or obesity in adolescents. These disorders are already treated at our hospital. The next step is to identify which of these patients have weight issues and how to best intervene to influence healthier nutrition and activity choices for the patient and their family. Krul, Van der Wouden, Schelleois, and Koes (2009) concluded, that overweight and obese children experience musculoskeletal problems more frequently than do normal-weight children.

The literature review and primary and secondary data demonstrate that overweight and obese children are at great risk for not only orthopaedic and neuromusculoskeletal conditions, but life long, threatening diseases, as well. As many of the articles show, children with orthopaedic and neuromusculoskeletal conditions are at higher risk for overweight or obesity. Our hospital data
demonstrates an increase in the numbers of overweight and obese children presenting with orthopaedic problems. In addition, prior to the work being done on and the results of the CHNA, the topic of being overweight or obese was brought up much less frequently than indicated by the incidence of being overweight or obese in our patient population. Finding ways to address these issues sensitively requires trial and error, tact, and persistence. Actions to be taken at SHC—TWI include, but are not limited to the following.

- Step one is to record the BMI routinely.
- Step two is to start a discussion with the patient and their family about healthy nutrition and activity if the BMI is in the 85th percentile or greater.
- Document the discussion regarding BMI, nutrition and activity, and their reaction in the EMR.
- Send a letter to the primary care physician communicating SHC—TWI has initiated a discussion with the patient and family about nutrition and activity (see Exhibit 1).
- A multidisciplinary team approach will be used to address BMI, activity and nutrition with patients and their families. Medical staff will diagnose overweight and obesity. Nutrition services will provide written materials on recipes, my plate, BMI, etc. Physical therapists, occupational therapists and child life specialists will suggest additional activities. Social workers will help find a support group if needed. Nurses will coordinate the care back to the primary care provider.
- There is abundant evidence through the MN Health Department and national research that the main cause for this excessive weight is due to inactivity and food consumption. SHC—TWI also found through primary source data that 40% of overweight and obese patients in one random sample were either uninsured or on Medicaid. This is in keeping with other data in the literature showing that low income families are disproportionately represented in the overweight and obese population groups. WIC data also shows that young children coming from a low income household have a higher incidence of being overweight or obese than the general population.
- WIC data also demonstrates the dramatic increase rate of obesity in children of American Indian descent.
- SHC—TWI hospitals data demonstrates with primary source data under diagnosis of patients who are overweight or obese is a problem.
- Setting up a treatment or a formal plan of action that children and families will follow is challenging.
- The data has shown us that there are many different factors that affect overweight and obese children with orthopaedic and neuromusculoskeletal conditions, nevertheless Shriners Hospitals for Children—Twin Cities main focus over the next few months is making sure our medical and
hospital staff are charting and following through with consults for each individual patient with a BMI in or higher than the 85th percentile.

Walking the Talk...

Focus areas

The Twin Cities hospital has limited resources with a vision of improving the health of our patients and families. There are about 80-90 employees in our building on any given day. Staff “walking the talk” about healthy nutrition and activity can have an impact on encouraging behavior change. Staff participation in healthy nutrition and activity events is hoped to stimulate light and fun spirited discussion with patients and their families. The first health kick off for employees was launched in March 2013. The March Health kick-off had a Healthy Red Heart pot-luck day as well as a demonstration day of the new exercise equipment purchased for staff use.

A Health and Wellness committee of staff who deal directly with patients and their care has been established. This committee’s first action is to help educate our medical and hospital staff on the process of diagnosis and treatment of a patient who is overweight or obese. This committee has created a Bwell 2gether campaign which targets nutrition, fitness, and family fun. The Bwell 2gether campaign is for our medical and hospital staff, patients, and patient families.

The committee is going to work on different aspects of fun nutritional information, as well as fitness ideas that the entire family can participate in to construct a healthy lifestyle. The main focus is current patients within the hospital. Patients and families within the hospital are being presented with many free educational opportunities. Some of the opportunities available for patients and their families include: healthy buffet for families, played food bingo, educational material such as fun ways to stay active and the importance of moving. After insuring a strong foundation for working with patients and their families, on the topic of healthy nutrition and activity choices, Shriners Hospitals for Children— Twin Cities will continue our community focus on overweight and obese children with orthopaedic problems by strengthening relationships with other organizations in the community also working on this issue.

- This summer Shriners Hospitals for Children— Twin Cities is holding a camp for patients with orthopaedic conditions in partnership with the Courage Center. Courage Center is a Minnesota-based non-profit rehabilitation and resource center that empowers people with disabilities to realize their full potential in every aspect of life.
- The SHC— TWI Professional Relations Director is assisting with a White Bear Lake School project on fun ways kids can be involved in a more active and healthier lifestyle. The White Bear Lake School also has staff from Children’s Hospital in Minneapolis educating students and their parents on the importance of a healthier lifestyle.
• The Twin Cities hospitals Child Life Department Director reached out to HCMC (Hennepin County Medical Center) to observe their Wellness program. The HCMC program has been successful in working with parents and the community to establish fun ways to address nutrition and fitness. SHC—TWI would like to adopt a similar approach that engages children and their parents in a spirit of learning and fun.

• By the end of 2013 our hospital will have a policy written for medical and other hospital staff addressing nutrition, fitness and activity, in order to create consistency throughout the hospital.

• As a hospital is dedicated to improving the health of anyone who steps through our doors, as well as and the community surrounding our hospital. Today community involvement has been defined by individual staff members, partnering with individual staff members at other organizations. In the future it is expected that Shriners Hospital for Children—Twin Cities will continue the work of individuals in building organization relationships with other organizations who share a common vision of a healthier Minnesota.

**Bwell 2gether – from nutrition 2 fitness 2 family fun!**

There can be no doubt childhood obesity in America is at epidemic levels. In the last 30 years the number of children who are overweight has tripled to 15%. A random sample of Shriners Hospitals for Children - Twin Cities (October, 2012) data demonstrated 20% of sample population having a BMI greater than the 85th percentile.

Children who are obese must not only confront the physical challenges (and in our case the healing challenges and what the extra weight is doing to their bodies), but also many psychological issues that stem from being overweight. These children often have low self-esteem, which is made worse when they are unable to participate in normal activities such as sports or playground activities. Obese children are teased, bullied and made to feel inferior on a number of levels.

Children with orthopedic conditions are often in more danger when they are overweight or obese. The extra weight can harm their joints, muscles, and worsen conditions. Recovery after surgery does not happen as fast on an unhealthy body. With healing slowed the risk of infection increases. Because of the significance of being overweight with musculoskeletal issues, our patients are seen by a dietician, a physical therapist or recreational therapist for activities and a social worker to offer support and to find resources in their communities to help with obesity management.

Obesity can be stopped. And it doesn’t take high-tech treatments or cutting-edge medications. The solution begins and ends with daily decisions.

The program Bwell 2gether began at Shriner's in the fall of 2012. A multi-disciplinary team was assembled to see what the Shriner's hospital's role could be in helping thwart this epidemic. Finding appealing and motivating activities for children and families which results in behavior change requires
trial and error. We are continuing to experiment with new ideas the obesity awareness work group will track inpatient referrals for BMI’s equal to or greater than the 85th percentile. It is expected that by 7 out of 10 charts with overweight or obese condition documented will receive a consult from nutrition services, child life, physical therapy, or social worker care coordinator. The consult will be documented in the patient education section of the patient’s EMR (Electronic Medical Record). If the team misses the patient a letter will be left or sent to the family. See exhibits 2, 3, and 4. Shriners Hospitals for Children—Twin Cities plans to help overweight and obese children with orthopaedic problems achieve a greater level of fitness through the following action plan. See Figure 13.

Figure 13

<table>
<thead>
<tr>
<th>Goal</th>
<th>Action</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase collaboration with primary care providers</td>
<td>Send letter to primary care physicians of all patients with BMI greater than 85th percentile.</td>
<td>Form letter has been drafted. By July 1, 2013, a letter will be sent to 90% of patients who have nutrition consult. See exhibit 1.</td>
</tr>
<tr>
<td>BMI and BMI percentile will be routinely collected.</td>
<td>Celebrate success of patients who lose weight. Strategize with families of patients who are not making progress or who are continuing to gain weight.</td>
<td>A log of patients who are overweight or obese and receiving intervention will be maintained, so that efficacy of different interventions can be assessed. Start Q4, 2013.</td>
</tr>
<tr>
<td>Identify trends related to complications, and repeat procedures in overweight children with Blount disease and slipped capital femoral epiphyses.</td>
<td>Study the internal data collected on overweight and obese children with Blount disease and slipped capital femoral epiphyses</td>
<td>Results of internal data on children with Blount disease and slipped capital femoral epiphyses from 2006 to 2012 will be summarized. Complete 3Q, 2013.</td>
</tr>
<tr>
<td>Provide nutrition and education, guidance and support to patients and families.</td>
<td>900 letters sent to families inviting participation in a 10 week program designed to increase nutrition and fitness levels. Invited families to a meal in a private setting. Discuss in a health fun way portion control, movement, recipes, etc.</td>
<td>Only 2 families responded with interest. Poor participation (2-4 families). Families not interested in this type of forum. Tried buffet with healthy choices and recipes after this. Limited interest. Find a method of engaging patients and families in discussion of nutrition and fitness in a way that is motivating and results in increased participation. Solicit family input on what would work for them. Continue to try different approaches. Document results.</td>
</tr>
<tr>
<td>Goal</td>
<td>Action</td>
<td>Result</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Develop and discuss activity programs.</td>
<td>Patient and family activity programs will be developed that result in active participation of patients and families.</td>
<td>Implemented program for family to run or walk 5 K waiving race entry fees for participation. Limited interest. 1st Q, 2013.</td>
</tr>
<tr>
<td>Initiate new camp in partnership with Courage Center.</td>
<td>Increase number of wheelchair bound patients, especially spina bifida patients participating in w/c fitness activities.</td>
<td>Will be able to document baseline participation of wheelchair bound children in physical activity in 2013. See attached “no boundaries” invitation.</td>
</tr>
<tr>
<td>Increase use of nutrition consults for inpatient.</td>
<td>In patient staff will call nutrition services to notify them about an overweight or obese inpatient. Nutrition services will also do case finding on inpatient unit.</td>
<td>7/10 overweight and obese (BMI greater than 85th percentile) inpatients will receive a documented nutrition consult. Monthly reporting by September, 2013.</td>
</tr>
<tr>
<td>Increase use of nutrition /fitness consults in outpatient arena.</td>
<td>Outpatient staff will call nutrition services or representative of the fitness team when an outpatient presents with a BMI equal to or greater than 85th percentile.</td>
<td>50% of overweight and/or obese outpatient children will receive a documented nutrition consult.</td>
</tr>
<tr>
<td>Support behavioral modifications.</td>
<td>Social workers will share techniques for motivational interviewing. Social workers will develop a list of resources in child’s home community for support in making nutrition and fitness lifestyle changes.</td>
<td>List of resources will be available in the clinic supporting families interested in making life style changes by September, 2013.</td>
</tr>
</tbody>
</table>
Acknowledgements

References

1. 2001 Minnesota Student Survey. www.dhs.state.mn.us
2. 2007 Youth Risk Behavior Survey, Centers for Disease Control and Prevention
   http://apps.nccd.cdc.gov/YRBSS
3. MN 2010 Needs Assessment.pdf page 43 of 74
4. Physical Activity and the Health of Young People. U.S. Department of Health and Human
   Services, Centers for Disease Control and Prevention (November, 2008) retrieved from
   Diseases Associated with Childhood Obesity. AJR, 188: 1118-1130.
6. Krul, Marjolein M.D., Van der Wouden, Johannes C. PhD, Schellevis, Francois G. M.D.,
   PhD.,Overweight and Obese Children. Annals of Family Medicine, Volume 7, No. 4,
   pg. 352-356.
### Exhibits

#### Exhibit 1

Demographics Expert 2.7
2012 Demographic Snapshot
Area: SHC Twin Cities Market Area
Level of Geography: ZIP Code

### DEMOGRAPHIC CHARACTERISTICS

<table>
<thead>
<tr>
<th>Selected Area</th>
<th>USA</th>
<th>2012</th>
<th>2017</th>
<th>% Change 2012 - 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Total Population</td>
<td>13,434,703</td>
<td>281,421,906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012 Total Population</td>
<td>14,624,766</td>
<td>313,095,504</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017 Total Population</td>
<td>15,114,070</td>
<td>325,256,835</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Change 2012 - 2017</td>
<td>3.3%</td>
<td>3.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Household Income</td>
<td>$65,525</td>
<td>$67,315</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### POPULATION DISTRIBUTION

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2012</th>
<th>% of Total</th>
<th>2017</th>
<th>% of Total</th>
<th>USA 2012</th>
<th>% of Total</th>
<th>USA 2017</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>2,892,622</td>
<td>19.8%</td>
<td>3,009,702</td>
<td>19.9%</td>
<td>20.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-17</td>
<td>624,303</td>
<td>4.3%</td>
<td>593,774</td>
<td>3.9%</td>
<td>4.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>1,520,593</td>
<td>10.4%</td>
<td>1,547,286</td>
<td>10.2%</td>
<td>9.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>1,953,699</td>
<td>13.4%</td>
<td>1,979,955</td>
<td>13.1%</td>
<td>13.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>4,112,887</td>
<td>28.1%</td>
<td>3,920,634</td>
<td>25.9%</td>
<td>28.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>1,669,038</td>
<td>11.4%</td>
<td>1,947,904</td>
<td>12.9%</td>
<td>11.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>1,851,624</td>
<td>12.7%</td>
<td>2,114,915</td>
<td>14.0%</td>
<td>12.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14,624,766</td>
<td>100.0%</td>
<td>15,114,070</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HOUSEHOLD INCOME DISTRIBUTION

<table>
<thead>
<tr>
<th>Income Distribution</th>
<th>USA 2012</th>
<th>% of Total</th>
<th>USA 2017</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$15K</td>
<td>608,728</td>
<td>10.5%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>$15-25K</td>
<td>597,743</td>
<td>10.3%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>$25-50K</td>
<td>1,599,170</td>
<td>27.5%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>$50-75K</td>
<td>1,278,514</td>
<td>22.0%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>$75-100K</td>
<td>774,018</td>
<td>13.3%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>Over $100K</td>
<td>955,968</td>
<td>16.4%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>5,814,141</td>
<td>100.0%</td>
<td>15,114,070</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### EDUCATION LEVEL

<table>
<thead>
<tr>
<th>Education Level Distribution</th>
<th>USA 2012</th>
<th>% of Total</th>
<th>USA 2017</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>341,818</td>
<td>3.6%</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>653,687</td>
<td>5.9%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>High School Degree</td>
<td>2,897,038</td>
<td>30.2%</td>
<td>28.7%</td>
<td></td>
</tr>
<tr>
<td>Some College/Assoc. Degree</td>
<td>3,002,456</td>
<td>31.3%</td>
<td>28.5%</td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree or Greater</td>
<td>2,782,249</td>
<td>29.0%</td>
<td>27.8%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,587,248</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

### RACE/ETHNICITY

<table>
<thead>
<tr>
<th>Race/Ethnicity Distribution</th>
<th>USA 2012</th>
<th>% of Total</th>
<th>USA 2017</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Non-Hispanic</td>
<td>12,011,913</td>
<td>82.1%</td>
<td>62.8%</td>
<td></td>
</tr>
<tr>
<td>Black Non-Hispanic</td>
<td>864,356</td>
<td>5.9%</td>
<td>12.3%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>923,615</td>
<td>6.3%</td>
<td>17.0%</td>
<td></td>
</tr>
<tr>
<td>Asian &amp; Pacific Is. Non-Hispanic</td>
<td>454,105</td>
<td>3.1%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>All Others</td>
<td>370,777</td>
<td>2.5%</td>
<td>2.9%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14,624,766</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Exhibit 2
Resources for Pediatric Health Care in the MN Area

Children’s Hospitals and Clinics of MN: Serving the state of MN from a St. Paul and Minneapolis 347 bed campus. Website is a source of many child friendly nutritious recipes.

http://www.childrensmn.org/

Courage Center: Offers full continuum of services including rehabilitation and recreational services for people with disabilities.

http://www.couragecenter.org/ContentPages/OurServices.aspx

Gillette Children’s Specialty Health Care: Provides short and long term care to people with disabilities that began in childhood.


Hennepin County Medical Center: Full service 422 bed level one adult and pediatric trauma center

http://www.hcmc.org/about/index.htm

Mayo Clinic: Large integrated health center

http://www.mayo clinic.org/about/

Medical Home Reference Website-

The MN Chapter of the American Academy of Pediatrics


University of MN Amplatz Children’s Hospital: Affiliated with the University of MN.

Exhibits

Exhibit 3

---

**SHC/TC: Nutrition Services**

Memo

Date: May 29, 2013

To: whom it may concern

From: Susan Marx, MEd, RD, LD
Registered Dietitian

Sheila Swenson, DTR
Dietetic Technician, Registered

We are sorry that we missed meeting with you after your surgery/at your clinic appointment yesterday. Same-day surgery/Sometimes clinic patients often have unpredictable schedules!

We try to meet with all patients who have a growth pattern outside of normal ranges. Your weight and height indicate that your calculated Body Mass Index is above normal range. We have attached a copy of your growth charts and information about Body Mass Index to help you see where your growth is at this point in time.

We hope to meet with you at your next appointment here at Shriners Hospital. In the meantime, here are some recommendations to help you choose healthy foods and snacks:

- Be sure to meet with your regular doctor or clinic to get more information about your Body Mass Index and your health.
- Try to use the *My Plate* recommendations for making healthy food choices.
- Use the recipe information and healthy eating behaviors to change some of your eating habits.
- We have also attached our contact information – call or e-mail if you have questions.
Exhibit 4

**Body mass index-for-age percentiles:**
*Boys, 2 to 20 years*

A 10-year-old boy with a BMI of 23 would be in the obese category (95th percentile or greater).

A 10-year-old boy with a BMI of 21 would be in the overweight category (85th to less than 95th percentile).

A 10-year-old boy with a BMI of 18 would be in the healthy weight category (5th percentile to less than 85th percentile).

A 10-year-old boy with a BMI of 13 would be in the underweight category (less than 5th percentile).

CDC: Centers for Disease Control:  http://www.cdc.gov
Dollars and sense: Eat well for less.
Shopping strategies can save you money while making healthy choices.

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>COST CONSIDERATIONS</th>
<th>ADDITIONAL SUGGESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLANNED LEFTOVERS:</td>
<td>85/15 Ground beef has about a 75% yield. So at $3.98 per pound, each cooked ounce costs $.33 cents. Bone-in roast beef at $7.98 per pound can have a yield as low as 50%, so each ounce could cost $1.00.</td>
<td>Use only one-half of the amount of meat in the recipe. Accordion recipes mean prepare once, serve four meals.</td>
</tr>
<tr>
<td>FRESH vs FROZEN:</td>
<td>Easter Dinner: Out-of-season strawberries may be promoted by your grocer, but they are often woody, and have little flavor. Frozen strawberries may cost one-half the price and have peak-of-the-season flavor.</td>
<td>Find a fresh tomato sauce recipe to use during peak of the fresh tomato season. Add shredded carrots, celery, and onions to expand the recipe, add nutrients and flavor. Make your own vegetable seasoning using salt, pepper, herbs and real butter.</td>
</tr>
<tr>
<td>BLT’s – BROCCOLI, LETTUCE, CARROTS, AND TOMATOES:</td>
<td>Those bags of ready-to-use fresh vegetables can be part of a cost strategy if used properly.</td>
<td>Side salad tonight, layered salad entrée tomorrow, and veggies and dip on Thursday.</td>
</tr>
<tr>
<td>SALAD DRESSINGS:</td>
<td>Easy as vinegar, salt, pepper, and dried herbs. Whisk-in-the olive oil last.</td>
<td>Oh, and you use only about one-fourth of the amount that you would usually pour out of a bottle.</td>
</tr>
<tr>
<td>BUY LOCAL AND SEASONAL:</td>
<td>Think farmers’ markets and the date on the calendar.</td>
<td>Freeze the extras.* Not all fruits and vegetables require special handling before freezing. See U of MN Extension Bulletin WW-00555.</td>
</tr>
<tr>
<td>BONUS STRATEGY – REDUCE PORTION SIZES:</td>
<td>We are subject to portion-distortion. Think one-half cup. Super-sized does not mean super-nutritious.</td>
<td>Portion sizes Coffee – 5 ounces Apples – 3 inches in diameter Nuts – 2 tablespoons</td>
</tr>
</tbody>
</table>

*Follow directions for the safe handling of frozen foods.
Dear Dr. Name:

Your patient, PATIENT NAME, was seen today at Shriner’s Hospitals for Children®- Twin Cities. As part of our assessment, we do a height and weight on every patient and then calculate and plot a BMI. Your patient’s BMI was either >30 or placed the patient, based on age and sex, in >95% category. Because of the significance of being overweight with musculoskeletal issues, our patients are seen by a dietician, a physical therapist or recreational therapist for activities and a social worker to offer support and to find resources in their communities to help with obesity management.

We are referring, PATIENT NAME, to you for on-going management of their weight issues. Our recommendation is these patients are screened for metabolic syndrome. We will continue to follow your patient from an orthopedic standpoint, at least every six months to one year.

We look forward to partnering with you regarding this patient’s care. If we can answer any questions or you would have concerns, please do not hesitate to contact us.

Sincerely,

Providers Name (NP,PA,MD)
Exhibit 7

NO BOUNDARIES SPORTS CAMP INFO

- Diagnosis: CP diplegia or spina bifida. No limb deficiency as they do Camp Achieve, but will take those patients if camp slots are not full.
- Kids must be able to use their arms, as some sports will be played in a wheelchair. Kids do not have to use a wheelchair as their main form of mobility.
- Camp is Friday July 19 and July 20 Saturday, 8:30-3:30.
- Parents must provide their own lodging, meals, and transportation
- Lunch and snack are provided for the participants.
- Parents must be available to provide any needed medical care for their child, i.e. cathing.
- The camp is being held at Courage Center in Golden Valley. Courage Center is providing the fields and courts. They will also have coaches who are paraolympians.
- The U of MN PT program will provide volunteers.
- Contact persons are Barb Knudson 612-596-6215 or Crystal Markfort 612-596-6216.
- Informational packets will be sent out once a child registers.