OPERATION DIABETES
APhA ACADEMY OF STUDENT PHARMACISTS

2012 – 2013 Planning Guide
This guide will help your chapter plan, organize, and implement your APhA-ASP Operation Diabetes projects and events.

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Notice

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Contributors
Candace T. Chelette, PharmD
Assistant Professor
University of Louisiana at Monroe

Managing Editor
Crystal Atwell, PharmD
APhA Director, Student Development
Dear Operation Diabetes Coordinator:

The American Pharmacists Association Academy of Student Pharmacists (APhA-ASP) is excited to again present Operation Diabetes, a national patient care project designed to increase the awareness of diabetes and its associated complications through blood glucose screenings and patient education. The 2012-2013 Operation Diabetes campaign has been made possible through an educational grant from Rite Aid.

Within a six month period, student pharmacists screened more than 26,000 patients and educate over 1.4 million. Through diabetes screenings and patient education, student pharmacists served their communities while advocating for the expanding role of pharmacists in diabetes care and chronic disease management. As the most accessible health care professionals, no one is better positioned to serve the community as a trusted source of diabetes education.

According to the American Diabetes Association, over 25 million Americans have diabetes and an estimated 79 million have pre-diabetes. However, studies have shown that early detection and treatment can aid in preventing secondary complications such as cardiovascular disease, vision loss, amputations, and renal failure. Through the Operation Diabetes campaign, student pharmacists have the opportunity to raise awareness in their communities and help patients avoid the long-term effects of undiagnosed diabetes.

The enclosed resource guide contains information on effectively planning and implementing Operation Diabetes events at your chapter. We strongly encourage you to take advantage of this valuable resource and the opportunity to impact the health of patients in your community. At the conclusion of this guide, you will also find a reporting form to document your chapter’s activities for submission to APhA. Recognition will be given to all chapters that participate in the Operation Diabetes campaign. Those chapters with the most innovative and successful projects will also receive regional and national awards at the 2014 APhA Annual Meeting & Exposition in Orlando, FL. Reports must be submitted no later than July 15, 2013, to be considered for an award.

Finally, I would like to express my appreciation to Rite Aid for the ongoing support of Operation Diabetes and for recognizing student pharmacists for their role in raising diabetes awareness and improving the health of patients in their community. I challenge every APhA-ASP Chapter to take full advantage of this program and to collaborate with pharmacists and other health care professionals in their area for this year’s Operation Diabetes campaign. Together, we can continue the successful tradition of Operation Diabetes and provide outstanding care to the community. Thank you in advance for your dedication to this campaign, and I look forward to another successful year of Operation Diabetes!

Sincerely,

David R. Steeb, Student Pharmacist  
2012-2013 APhA-ASP National President  
Eshelman School of Pharmacy University of North Carolina at Chapel Hill
The Need for Diabetes Education and Screening

Diabetes is a chronic health condition that affects 25.8 million people in the United States, or nearly 8.3% of the entire U.S. population. This statistic alone is staggering, and becomes even more alarming when one recognizes that 7 million of those individuals are currently undiagnosed.

While elevated blood glucose (1 of the key indicators of diabetes) may not seem consequential, the complications that can result from persistent elevations in blood glucose cause a significant amount of morbidity and mortality. For instance*:

- Patients with diabetes are 2 to 4 times more likely to have heart disease and/or suffer a stroke than someone who does not have diabetes.
- Diabetes is the leading cause of kidney failure, accounting for about 44% of new cases of kidney disease each year and the majority of all renal transplants that occur.
- More than 60% of non-traumatic lower limb amputations are caused by diabetes.
- Diabetes is the leading cause of new cases of blindness in people ages 20-74.
- Diabetes creates or contributes to many other health problems as well, including gastro paresis, impotence, impaired immune response, dental caries, depression, and more.
- 60-70% of people with diabetes have mild to severe forms of nervous system damage.
- Diabetes is the seventh leading cause of death in the U.S.

Diabetes education is instrumental in reducing the complications and decreasing the associated costs. Numerous studies have shown the impact pharmacy can have on diabetes outcomes. Pharmacists in all practice settings are in a key position to start providing care to individuals who have or are at risk of developing diabetes. Pharmacy programs for patients with diabetes involve activities ranging from identifying and referring at-risk patients to supporting the American Diabetes Association (ADA) recognized multi-disciplinary diabetes care programs. The ADA also recognizes pharmacies as health care settings and pharmacists as clinicians able to provide education and patient care services to patients with diabetes.


Goals of Operation Diabetes

Operation Diabetes seeks to help pharmacists and student pharmacists identify individuals in the community with previously undiagnosed diabetes and those who are at risk for developing the disease. In addition the program seeks to increase overall awareness of diabetes and the role pharmacists play in prevention and managing the effects of diabetes. Conducting blood glucose screenings and educating the public on the risk factors for diabetes, the importance of medication compliance, and tight control on blood glucose student pharmacists can help individuals across the nation improve their quality of life.

As student pharmacists and future health care providers, you demonstrate how the profession of pharmacy serves as an excellent resource in preventing the morbidity and mortality associated with diabetes. You have the opportunity to take your knowledge outside of the classroom and make a difference for the community. It could be as simple as writing a letter to the editor of a local paper highlighting the impact of diabetes education by pharmacists. It could be as large as conducting blood
glucose screenings and foot exams at a major health fair. It all starts with one idea, one chapter, and one community.

**Background on Operation Diabetes**

Operation Diabetes was launched as an official APhA-ASP National Patient Care project in 2001. Since that time, over 220,000 individuals have been screened for abnormal blood glucose levels. In 2011 alone:

- Number of schools participating → 67
- Number of patients screened in 2011 campaign → 26,744
- Number of patients referred to their healthcare provider in 2011 campaign → 1,448
- Number of patients educated (received Health & Wellness/Clinical Services & reached through public relations initiatives) in 2011 campaign → 1,435,491

**Operation Diabetes Awards**

APhA-ASP recognizes each chapter that implements an Operation Diabetes program in their community. In addition, one Chapter from each of the 8 APhA-ASP regions and 1 national winner are recognized during the APhA Annual Meeting & Exposition at the APhA-ASP Opening General Session, in *Student Pharmacist* magazine, and on the APhA website. For more information on the Operation Diabetes reporting process, please refer to the “Reporting Guidelines” section of this planning guide.

**Highlights from the 2011 Award Recipients**

*National Winner: Idaho State University*

Student pharmacists evaluated the needs of their state and created ways to meet the large geographical area, that ranks 45th among the states in population density. They focused on providing services where most needed, reaching out to previously unvisited areas and returning to sites that they had not been for some time. This included earning a grant to travel to two rural counties in the state known to be underserved regarding pharmacy care. Their efforts are summed up by one participant of their 5K Fun Walk/Run for Diabetes, who stated, “I hope you guys know how important what you’re doing is.”

*Region 1 Winner: The University of Rhode Island*

Face of Pharmacy Day – Health topic booths were set up at the State House to raise awareness of the many services pharmacists provide. Students were able to interact with legislators and demonstrated professionalism and health care knowledge.

*Region 2 Winner: Virginia Commonwealth University*

9th Annual Healthy Lifestyle Expo - 100 exhibitors from various healthcare organizations and related businesses in the Richmond Area participated in this 6 hour event. Student pharmacists provided blood pressure and blood glucose screenings, education patients on the results and referred to a practitioner when needed.
Region 3 Winner: Mercer University
Student pharmacists tailored their screenings to specific populations. They addressed the diversity of these communities by having a variety of resources available that address different socioeconomic, language and cultural backgrounds. The committee chairs received a variety of educational material from the American Diabetes Association (ADA), American Heart Association and other health care associations. At several of the events, they had professional translators present in order to assist student pharmacists with communicating to patients.

Region 4 Winner: University of Wisconsin-Madison
The Chapter provided interactive presentations to elementary and junior students. The goal of the presentations was to inform students about diabetes, related risk factors, and prevention strategies for type 2 diabetes.

Region 6 Winner: University of Arkansas for Medical Sciences
The Mexican Consulate provides a variety of services to the Latino population of Arkansas. The Consulate started a new health initiative called “Health Windows”. The purpose of this program – which is a partnership between the Mexican government and UAMS – was to provide health screenings and medical information to Mexican nationals living in Arkansas. Operation Diabetes was incorporated into the program by screening individuals and providing diabetes education and lifestyle counseling.

Region 7 Winner: Oregon State University
Students worked to reach the underserved in the hometowns by partnering with a Rite Aid stores and other local pharmacies. During their spring break, students provide blood glucose screenings and education to patients.

Region 8 Winner: University of Southern California
One of the Chapter’s primary objectives under this project, was to focus on providing assistance to those with a greater risk of developing diabetes. At events such as the SHARE Smoking Cessation Presentation, student pharmacists provided those attendees who wanted to quit smoking with a brief presentation on diabetes and smoking, and suggestions for lifestyle changes. This was followed by one-on-one counseling with patients.
How to Use this Guide

This planning guide will help assist you with the implementation, management, and marketing of a diabetes screening campaign in your community. The material includes:

- Basic clinical practice information
- Step-by-step approach on how to run the campaign
- Suggested promotional material
- Additional resources
- Instructions for reporting

When it comes to your APhA-ASP Operation Diabetes campaign, be creative, have fun, and most importantly, help your community to fight diabetes.
CHAPTER ADVISORS

The American Pharmacists Association Academy of Student Pharmacists (APhA-ASP) is proud to present Operation Diabetes, a national patient care project focused on the prevention of diabetes and the complications associated with it. By participating in public awareness campaigns, community outreach activities, and individual patient assessment and education, student pharmacists can help patients understand their risk for diabetes. With your support, student pharmacists involved in the Operation Diabetes campaign can empower patients with the knowledge and management strategies necessary to reduce their risk for diabetes.

As APhA-ASP Chapter Advisor, you serve as a consultant, advocate, and a point of continuity for your chapter and its leaders. To assist you in these roles, please review the following sections for information on:

- Safety and Other Regulatory Considerations
- Screening and Photo Release Forms
- Operation Diabetes Reporting Guidelines

The information in this planning guide is meant to serve as a foundation for organizing an Operation Diabetes campaign but should not be considered comprehensive. In addition to federal requirements, many states and local agencies (e.g., state boards of pharmacy, local health departments) may have additional regulations. Please assist your chapter leaders with consulting these entities prior to conducting community events.

As an APhA-ASP Chapter Advisor, you play a vital role in both the success of your chapter’s Operation Diabetes campaign and the personal and professional development of student pharmacists. APhA would like to thank you for your continued support of student pharmacists and their activities.

Regulatory Considerations

Operation Diabetes presents student pharmacists with a unique opportunity to positively impact public health while promoting the profession of pharmacy. While the disease state screenings reviewed in this guide allow for a more comprehensive assessment of patients in the community, they may also be subject to additional laws and regulations. To reduce potential liability associated with patient care activities, you should ensure that student pharmacists participating in Operation Diabetes are appropriately trained (and when necessary, supervised by a trained health care professional) when performing disease state screenings or providing individual patient education. Additionally, student pharmacists should adhere to all applicable local, state, and national regulations and safety procedures. Examples include the following:

- Ensure patients understand the information and services being provided to them. In some states, informed consent may be required before patients may participate in certain activities. Patients should also understand who is providing the information or service (e.g.,
student pharmacists) and that these activities should not be viewed as a substitute for evaluation by their primary care provider.

- Ensure student pharmacists obtain appropriate training (i.e., recognized by professional and regulatory bodies) prior to providing patient education or performing disease state screenings and other patient care activities. While students may receive some training as part of the pharmacy curriculum, it may be beneficial to provide additional training prior to Operation Diabetes events. (See the “Planning Events” section for suggestions on training approaches.)

- Follow standards and other safeguards required by your state board of pharmacy and other federal, state, or local regulatory agencies. For example, supervision by a licensed pharmacist may be required. Additionally, pharmacists participating in community events are encouraged to hold personal liability insurance.

Institutional Review Board

Some patient information may be collected and shared with APhA and other organizations as part of the Operation Diabetes campaign. Based on the definitions employed by your school or college’s Institutional Review Board (IRB), this may constitute “research” and may therefore be subject to IRB review or approval. As APhA-ASP Chapter Advisor, you should guide your chapter leaders through this process. Additionally, ensure that all patient information is properly destroyed after project reports are completed.

Safety & Blood Exposure Risks

If student pharmacists perform blood glucose screenings as part of the Operation Diabetes campaign, these activities must comply with standards regulated by the Occupational Safety and Health Administration (OSHA). These requirements are designed to reduce the risk of exposure to blood-borne pathogens, such as human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). One approach to these regulations is known as “universal precautions”, where all human blood and other potentially infectious materials are considered infectious. Regulations became more rigorous in 2001 with the implementation of the Needle Stick Safety and Prevention Act, which requires entities to use safer needle devices and maintain a log of injuries from contaminated sharps. All health care professionals, including student pharmacists and other trainees, must comply with the updated regulations. Other safety strategies may include the following:

- Ensure student pharmacists are trained on the safe and appropriate handling and disposal of sharps devices (e.g., needles, lancets). For example, syringes and needles should not be separated or recapped after use. Instead, they should be placed in a designated sharps or biohazard container.

- Consult applicable regulations concerning the disposal of sharps containers. For more information, also consider contacting a waste-disposal company in your area.
Several states now encourage or require use of specially-designated safety needles/lancets that reduce the risk of needle-stick injuries.

Federal legislation requires that institutions develop a policy that addresses pre-exposure vaccination, post-exposure management (e.g., hepatitis B vaccine, HBIG), as well as medications appropriate for acute post-exposure management of HIV-infected blood. Ensure student pharmacists understand and comply with this policy during their patient care events.

Student pharmacists should keep the work area clean. Student pharmacists are encouraged to wear gloves and should consult policies recognized at local health clinics.

For more information on needle stick prevention, be sure to visit the following web site: http://www.osha.gov/SLTC/bloodbornepathogens/standards.html.

**CLIA Waivers**

All laboratory testing performed on humans is subject to regulation by the US Centers for Medicare & Medicaid Services (CMS) as part of the Clinical Laboratory Improvement Amendments (CLIA). The goal of CLIA is to ensure the safety and quality of laboratory measurements. CLIA regulations are categorized by test complexity as being waived, moderate, or high. Most point-of-care tests conducted as part of community health screenings are considered CLIA-waived and only require certification/training to perform. Examples include point-of-care tests to evaluate blood glucose and lipid levels.

Student pharmacists should observe good laboratory practices when conducting disease state screenings and other patient care activities. Such practices may include the following:

- Keep the manufacturer product insert for each laboratory test and ensure it is available at all times. Always use the product insert for the kit currently in use. Read the product insert prior to performing a test.
- Follow the storage requirements for the test kit. Do not mix components of different kits.
- Assemble all required reagents and equipment before performing each test.
- Become familiar with the test procedure. Perform each step in the proper order.
- Know the time required for performing the test and achieving an optimal result.
- Be able to recognize when the test is finished.
- Follow manufacturer instructions for ensuring quality-control prior to testing samples.
- Follow manufacturer instructions for specimen collection and handling (e.g., temperature and container requirements).
Be sure to label the specimen with an identifier unique to each patient.

Inform the patient of any test preparation (e.g., fasting, clean catch urines).

Record test results in the proper place rather than on unidentified notes or pieces of scrap paper, which could be misplaced. Include the name of the test, the date the test was performed, and the initials of the testing personnel in the test record. If the same test is performed on a patient multiple times in one day, include the time of each test.

Record the results according to the instructions in the product insert.

If the test is qualitative, spell out positive or negative results, as symbolic representations can be altered (the “–” can be altered to a “+”).

Perform instrument maintenance as directed by the manufacturer.

Additional information on CLIA is available at http://www.cms.hhs.gov/clia.

Screening & Photo Release Forms

Samples of screening evaluation sheets, logs, and participation forms have been provided in this planning guide. These samples should be adjusted to meet the needs of each chapter. You may want to consider consulting the legal team at your school or college of pharmacy to develop a photo release form for any photos taken during your events, especially if you intend to show participant faces in your photos.

Operation Diabetes Reporting Guidelines

As a Chapter Advisor, you must review and approve the Operation Diabetes report prior to its submission to APhA. For a full description of the Operation Diabetes reporting requirements, please see in the Reporting Guidelines section of this planning guide.
Provision of Training and Education for Participants

All student pharmacists participating in Operation Diabetes should be provided with a copy of the material provided in this section of the planning guide as a supplement to additional training by a pharmacist, preferably a faculty member. Please refer to the references at the end of this section for more information. Participating pharmacists should also be provided with a copy of the material for reference purposes.

Approximately 1 to 2 weeks prior to the scheduled Operation Diabetes screening event, a live training session should be held to review the basic principles applicable to diabetes screening and allow students the opportunity to practice using glucometers. Neither this module, nor the live training session, is intended to provide comprehensive diabetes education and training for student pharmacists. Students from each professional year may participate in screening events; therefore, the live training session is essential to ensure students at all levels are familiar with basic principles and procedures for the event. Participating pharmacists should also be invited to attend the live training session to become familiar with the procedures for the Operation Diabetes event.

Diabetes Statistics

Diabetes is a chronic illness requiring continuous medical care and ongoing patient self-management education and support to prevent acute complications and reduce the risk of long-term complications.

- Diabetes ranks the 7th leading cause of death in the U.S. affecting 25.8 million people in the United States (8.3% of the U.S. population).
- Over 7 million persons have undiagnosed diabetes and 79 million have prediabetes. If left uncontrolled or untreated, diabetes can lead to severe complications.
  - Diabetes is the LEADING cause of kidney failure, nontraumatic lower limb amputations, and new cases of blindness among adults in the U.S.
- Diabetes affects everyone, but certain racial disparities exist. Non-Hispanic blacks and Hispanics have a higher prevalence of diabetes than non-Hispanic whites and Asian Americans.

With this growing epidemic, education is vital for not only helping a patient to manage their diabetes, but more importantly to educate the lay person on recognizing the signs and symptoms of diabetes and thus referring them to their healthcare provider for diagnosis and early treatment. In addition to providing education at screening events, using a point-of-care glucose monitor (glucometer) has been an invaluable tool to screen patients for diabetes.

One major area of education is with children. About 215,000 children younger than 20 years of age have diabetes (about 1 in every 400 children) which makes it the most common chronic disease of childhood. Based on the latest data from 2002 – 2005, the rate of newly diagnosed type 1 diabetes was 15,600 and type 2 diabetes was 3,600 persons younger than 20 years. With these statistics in mind, any opportunity to educate youth on health measures to prevent diabetes is a project to consider for Operation Diabetes.
Diabetes Overview

Diabetes mellitus is a group of metabolic diseases characterized by the inability to regulate glucose metabolism which results from defects in insulin secretion, insulin action, or a combination of both. Pancreatic β-cells produce insulin that is used by the body to metabolize carbohydrates, fats, and proteins into glucose and other compounds that can be utilized as energy sources by various tissues such as muscles, the brain, etc. In patients afflicted with diabetes, the body’s utilization of carbohydrates, fats, and proteins is compromised and results in high concentrations of glucose in the bloodstream known as hyperglycemia. This breakdown in normal function can be a result of several processes: complete lack or decrease of insulin secretion by the pancreas and/or impaired uptake of glucose from the bloodstream by various tissues. Hypoglycemia is defined as a blood sugar of ≤ 70 mg/dL and can occur in diabetic patients that are using insulin or other oral medications known to decrease blood sugar. Although many patients can tolerate lower blood sugars, patients should be warned not to allow their sugar to drop below 60 mg/dL.

Every tissue in the body requires access to glucose for energy which is made available by the action of insulin. This interaction between the body and the food we digest is mediated via insulin and its various receptors located throughout the body. The process of glucose utilization by the body can be simply described by using the famous lock and key analogy. Imagine the tissues and cells of the body are individual houses with locked doors (receptors). Entrance to the house requires a key to the door. Without the correct key, the door cannot be opened. Glucose and insulin work the same way; without the key (insulin) people (glucose) cannot get through the locked door (receptor). Diabetes is a disease whereby the normal interaction between glucose, insulin and various receptors is defective. The reason for this defect is used to categorize the disease as Type 1 and Type 2. The specifics of both categories will be discussed at length.

Normally, when we digest food, it is metabolized into simple compounds, one of those being glucose. Glucose is used throughout the body as a source of energy. It can be stored for future needs or used immediately. Once glucose is made available to our body by the digestive system, it enters into the bloodstream to be disbursed throughout the body. Our pancreas is alerted to this sudden increase of glucose in the bloodstream and begins to synthesize and release insulin. The insulin then activates the receptors throughout the body and glucose is taken up by the tissues that need it. However, a small percentage of the glucose becomes “embedded” in the hemoglobin proteins that make up red blood cells. This concept is the basis for measuring hemoglobin A1C which will be discussed at a later time. Any disturbance in this process can prevent the glucose from being utilized by the body, thus leading to hyperglycemia. Clinically, hyperglycemia is defined by a high blood glucose measurement as well as a presence of signs and symptoms that can be found in the table 1 below. Over time, the increased concentration of glucose can damage our vascular system and cause serious complications. Also, consistently high amounts of glucose in the bloodstream result in more glucose becoming “embedded” in hemoglobin which in turn results in higher A1C measurements.

When insulin is in short supply, glucose cannot be utilized, thus the muscles and tissues of our body begin to use fat and protein for energy. Conversion of fats and proteins into usable compounds yields a high amount of ketones which are byproducts that cannot be utilized for energy. Dangerously high amounts of ketones in the body, known as ketoacidosis, can occur if diabetes is left untreated. Ketoacidosis can result in serious complications and even death in extreme cases.
The concentration of glucose in our blood stream fluctuates throughout the day. Many diabetic patients use a glucometer, which is a meter used to check blood glucose throughout the day. Patients with type 1 diabetes should check three or more times daily, while type 2 diabetics may check one to three times depending on how controlled they are. The readings patients get at home are typically used to determine dosing of insulin or other medication changes. The American Diabetes Association (ADA) publishes guidelines annually which give healthcare providers guidance on acceptable ranges patient’s blood glucose should be within. In the morning, before breakfast, blood sugar ranges should be within 70 – 130 mg/dl per the ADA Guidelines. This reading is considered a fasting blood glucose or preprandial; assuming that the last meal on the previous day occurred at least 8 hours prior. About one to two hours after the start of any meal, the glucose concentration is termed the postprandial reading. This reading is typically higher than the fasting blood glucose in the morning, but should be <180 mg/dl. These numbers vary with each individual because of contributing factors, including the amount of carbohydrates ingested and insulin response to their meal. Also, the ADA goal concentrations may vary slightly depending on age and health condition of the individual. Refer to table 2 for the 2012 ADA glycemic goals.

### Table 1 – Signs and Symptoms of Poor Glycemic Control

<table>
<thead>
<tr>
<th>Symptoms of Hyperglycemia</th>
<th>Symptoms of Hypoglycemia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td><strong>Chronic</strong></td>
</tr>
<tr>
<td>Frequent Urination (polyuria)</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Excessive Thirst (polydipsia)</td>
<td>Shakiness</td>
</tr>
<tr>
<td>Weight loss</td>
<td>Sweating</td>
</tr>
<tr>
<td>Blurred vision</td>
<td>Changes in vision</td>
</tr>
<tr>
<td>Irritability</td>
<td>Hunger</td>
</tr>
<tr>
<td>Increased fatigues</td>
<td>Pale skin color</td>
</tr>
<tr>
<td>Increased susceptibility to infection (poor wound healing)</td>
<td>Inability to concentrate and anxious</td>
</tr>
<tr>
<td>Dry mouth and skin</td>
<td>Unexpected and unexplained changes in mood</td>
</tr>
</tbody>
</table>

### Table 2 – Glycemic Goals

<table>
<thead>
<tr>
<th>Glycemic Control</th>
<th>Fasting/Preprandial Plasma Glucose (mg/dL)</th>
<th>Postprandial Plasma Glucose (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-diabetes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normoglycemia</td>
<td>70 – 100</td>
<td>&lt; 140</td>
</tr>
<tr>
<td>Hyperglycemia</td>
<td>&gt; 100</td>
<td>&gt; 140</td>
</tr>
<tr>
<td>A1C</td>
<td>&lt; 5.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypoglycemia</td>
<td>&lt; 70</td>
<td></td>
</tr>
<tr>
<td>Normoglycemia</td>
<td>70 – 130</td>
<td>&lt; 180</td>
</tr>
<tr>
<td>Hyperglycemia</td>
<td>&gt; 130</td>
<td>&gt; 180</td>
</tr>
<tr>
<td>A1C</td>
<td>&lt; 7%</td>
<td></td>
</tr>
</tbody>
</table>

*Non-pregnant adults
Keep in mind that when evaluating a patient, the whole clinical picture (presence of signs/symptoms, diet habits, etc.) must be considered, not just lab values. One of the most important concepts for diabetes patients to understand is how to recognize the symptoms of high and low blood sugar. More importantly low blood sugar, since hypoglycemia can lead to coma or death in extreme circumstances.

**Type 1 diabetes**, previously known as insulin-dependent or juvenile diabetes, accounts for approximately 5% of all diagnosed cases of diabetes. In patients with Type 1 diabetes, the function of pancreatic β-cells, the main source of insulin production, has been destroyed. As a result, Type 1 patients have very minimal or no endogenous insulin and must rely on an exogenous source of insulin for normal function. Autoimmune processes, genetics and environmental factors can all play a role in the disease process of Type 1. The onset of Type 1 diabetes is an acute process usually resulting in a culminating hyperglycemic event which prompts an emergency visit to a physician. Unfortunately, screening programs are not likely to detect patients with Type 1 diabetes, because measurable risk factors such as impaired fasting glucose (IFG) and obesity do not play a role in the development of the disease.

**Type 2 diabetes** is a term used for individuals who have a progressive insulin secretion defect in addition to insulin resistance. Type 2 diabetes has also been known as non-insulin dependent diabetes and adult onset diabetes. However, these classifications are no longer applicable as an alarmingly high number of adolescents are being diagnosed with Type 2 and more and more Type 2 patients are using insulin to successfully manage their disease. As mentioned previously, the root of diabetes can be found in two processes: insulin deficiency and insulin resistance. Unlike Type 1, which is a result of insulin deficiency, Type 2 usually involves both processes which can make it harder to treat. Patients with Type 2 diabetes often are asymptomatic, as the disease develops slowly over time in adults who may or may not regularly seek health care. The majority of the 7 million undiagnosed patients with diabetes in the U.S. have Type 2 diabetes with the incidence increasing dramatically in adolescents, especially in minority populations. More community diabetes screenings should be geared towards adults that may have undiagnosed diabetes and adolescents at risk for diabetes. It is not uncommon for people with type 2 diabetes to have no symptoms or contribute their symptoms to other illnesses, etc. As pharmacists and student pharmacists, we have an opportunity to help patients manage their disease with pharmacologic and non-pharmacological therapy, diet and lifestyle changes, and frequent glucose testing in order to slow or prevent diabetes or long term complications from diabetes.

**Increased risk for diabetes (Pre-diabetes),** recognized as impaired glucose tolerance and impaired fasting glucose, occurs before the development of Type 2 diabetes. Type 2 diabetes is almost always preceded by pre-diabetes due to the slow and progressive onset of the disease. Evidence has shown that diabetes can be delayed or even prevented through lifestyle changes with or without medication management. Criteria for screening patients with risk factors for the development of Type 2 diabetes is noted in table 3.

| **Table 3 – Categories of increased risk for diabetes (pre-diabetes)** |
|-----------------|-----------------|
| Fasting blood glucose | 100 – 125 mg/dL |
| 2-hour blood glucose in the 75 gram OGTT* | 140 – 199 |
| A1C | 5.7 – 6.4% |

*Oral Glucose Tolerance Test (OGTT)- defined below in Diabetes Diagnosis section
Gestational diabetes is defined as any degree of glucose intolerance while being pregnant. The obesity epidemic had led to more type 2 diabetes in women of childbearing age, thus the number of pregnant women with undiagnosed type 2 diabetes has increased. Because of this, it is reasonable to screen women with risk factors for type 2 diabetes at their initial prenatal visit. Most of these women, 80 – 90%, have mild diabetes and are managed with lifestyle therapy alone. Pharmacists and pharmacy students can help with educating this population on healthy lifestyle modifications to better manage their diabetes. Since the stricter screening guidelines have been published in 2011, approximately 18% of all pregnancies are affected with gestational diabetes.

Patients that are diagnosed with diabetes during pregnancy may have been undiagnosed preexisting type 2 diabetics before pregnancy. For this reason, women with a history of gestational diabetes should be screened for diabetes 6 – 12 weeks postpartum. Women with a history of gestational diabetes have a 35% to 60% chance of developing diabetes in the next 10 – 20 years.

Diabetes diagnosis typically occurs after conducting an A1C test, fasting plasma glucose (FPG) test, 2-hour oral glucose tolerance test (OGTT), or random plasma glucose in patients who are experiencing a hyperglycemic crisis. Plasma glucose tests are the easiest and fastest test to perform in most clinical settings as they only require a plasma sample. The oral glucose tolerance test (OGTT) is also a very suitable test for diabetes, but is more expensive and time consuming. The patient receives a 75 gram oral glucose load dissolved in water, followed by a 2-hour wait. At the end of 2 hours, their plasma glucose is taken. In the absence of unequivocal hyperglycemia, the diagnosis should be confirmed by repeat testing. It is also important to note that a point-of-care A1C machine is not sufficient for diagnosis. The A1C test must be certified by the National Glycohemoglobin Standardization Program to be used. Both point-of-care glucometers and A1C machines are effective for screening, they should not be used for diagnosis; therefore, all patients should be referred to their primary care providers if they have blood glucose values in the at-risk for diabetes or diabetes range. Refer to table 4 for diagnostic criteria for diabetes.

<table>
<thead>
<tr>
<th>Table 4 – Criteria for diagnosing diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A1C ≥ 6.5%</td>
</tr>
<tr>
<td>• Fasting blood glucose ≥ 126 mg/dl</td>
</tr>
<tr>
<td>• 2-hour plasma glucose ≥ 200 mg/dl during an OGTT</td>
</tr>
<tr>
<td>• Random plasma glucose ≥ 200 mg/dl when symptoms of hyperglycemia or hyperglycemic crisis exist</td>
</tr>
</tbody>
</table>

It is important to also note that certain drugs may cause hyperglycemia or hypoglycemia. Refer to table 5 below for some common drugs that affect blood glucose levels. Complete medication histories should be taken when testing patients for diabetes.
Table 5 – Medications that May Affect Glucose Levels*

<table>
<thead>
<tr>
<th>Medication</th>
<th>Glycemic Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta adrenergic blockers</td>
<td>Mask hypoglycemia symptoms (tachycardia and tremor)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Hypoglycemia</td>
</tr>
<tr>
<td>Diuretics (thiazide, loop)</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Nicotinic Acid</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Hormonal Contraceptives</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Phenytoin</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Sympathomimetics</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Atypical Antipsychotics (aripiprazole, olanzapine, paliperidone, quetiapine, risperidone, ziprasidone, asenapine, iloperidone, clozapine)</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Isotretinoin</td>
<td>Hyperglycemia</td>
</tr>
<tr>
<td>Protease Inhibitors</td>
<td>Hyperglycemia</td>
</tr>
</tbody>
</table>

*This list includes common medications that cause glucose changes.

Diabetes Self-management and Prevention

Diabetes self-management is an important component to treating a patient at risk for diabetes or has a diagnosis of diabetes. When patients are educated on what’s and why’s of diabetes, they are more proactive in taking control of their overall health to prevent complications. When educating a patient on self-management, it is more important to listen to the patient rather than giving them information. Listening to the patient requires being responsive to individual patient preferences, needs, and values to know where to begin with education. The patient you are screening may need more education on diet and lifestyle modifications, whereas, another patient may need help knowing when to take their medication or manage side effects from that medication. Information is available through the American Diabetes Association on standards of care in providing education. These standards are updated every 5 years, with the next reviewing in 2013.

Lifestyle changes can be encouraged that can prevent and/or delay the onset of type 2 diabetes. A weight reduction of 7% body weight and regular physical activity with a reduced caloric and dietary fat diet can make a large difference in blood glucose readings or prevent diabetes if considered at risk. The following dietary modifications are recommended:

- Saturated fat < 7% of total calories
- Carbohydrates = 130 grams per day (carbohydrate count or choosing dishes with fewer carbohydrates).
- Fiber = 14 grams per 1,000 kcal (whole grains)

Patients should be shown how to read a nutrition facts label on foods to better manage their diet. As part of self-management, have them pick out a few of their favorite foods and compare the nutrition
facts from both to determine the better choice. Another great resource for patients is learning how to eat by looking at their plate. Refer to http://www.choosemyplate.gov/ for more information. In addition to following a diabetic friendly diet, incorporating physical activity has been shown to improve blood glucose control, reduce cardiovascular risk factors, contribute to weight loss, and improve well-being. Regular exercise can also prevent diabetes in high-risk individuals. ADA guidelines recommend 150 minutes per week of moderate-intensity, or 75 minutes per week of vigorous aerobic physical activity, or a combination of the two. For patients over the age of 65 years or with disabilities, the recommendation is to be as physically active as they are able. Resistance training is also recommended three times a week if able. If a patient has a history of a significant cardiovascular event, uncontrolled blood pressure, or severe neuropathy, they should be referred to their primary care provider before recommending the physical activities. Examples of moderate and vigorous activity are shown in table 6 below.

<table>
<thead>
<tr>
<th>Table 6 – Activity Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderate Activity</strong></td>
</tr>
<tr>
<td>Walking</td>
</tr>
<tr>
<td>Bicycling</td>
</tr>
<tr>
<td>Water aerobics</td>
</tr>
<tr>
<td>Gardening</td>
</tr>
<tr>
<td>Yoga</td>
</tr>
<tr>
<td>Hand-washing the car</td>
</tr>
</tbody>
</table>

Lifestyle interventions are more cost effective than medications for the prevention or delay of type 2 diabetes. If patients choose not to make lifestyle modifications, or their blood glucose remains high after initiating lifestyle modifications, metformin is recommended as first line for medication treatment. Metformin reduces A1C by 1 – 2% and may help with weight loss.

**Screening Programs**

The estimated cost of diabetes in the U.S in 2007 was approximately $174 billion dollars. It is possible that this figure has far surpassed this amount due to the growing number of adults and children that are affected by diabetes. Screening programs are one way to help our communities in the fight against diabetes. For many illnesses, there is a major distinction between screening and diagnostic testing; however, for diabetes, the same tests are used for “screening” as for diagnosis. The ADA has published screening criteria for testing adults and children with risk factors for the development of diabetes. This criterion is published annually as Standards of Medical Care in the Diabetes Care Journal. The screening test is provided under the tab marked “Forms” and may be used during Operation Diabetes screening events and routinely in pharmacy-based diabetes clinics. Table 7 below identifies risk factors for development of type 2 diabetes and is adapted from the ADA’s 2012 Medical Standards of Care.
Table 7 – Risk factors for Type 2 diabetes (Criteria for testing in asymptomatic patients)

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children (Age 10 or onset of puberty if younger)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Body Mass Index (BMI) &gt; 25 kg/m² plus one or more risk factors:</td>
<td>• BMI &gt; 85th percentile for age and sex, weight</td>
</tr>
<tr>
<td>• Physical Inactivity</td>
<td>for height &gt; 85th percentile, or weight &gt; 120%</td>
</tr>
<tr>
<td>• First degree relative with diabetes</td>
<td>of ideal for height</td>
</tr>
<tr>
<td>• High-risk race/ethnicity (Native American, African, Asian, Hispanic, Pacific Islander)</td>
<td>Plus any two of the following:</td>
</tr>
<tr>
<td>• Women who delivered a baby weighing &gt; 9 lb or were diagnosed with gestational diabetes</td>
<td>• Family history of type 2 diabetes in first</td>
</tr>
<tr>
<td>• Hypertension (BP ≥ 140/90 or taking blood pressure medication)</td>
<td>or second degree relatives</td>
</tr>
<tr>
<td>• HDL cholesterol &lt; 35 mg/dl and/or triglyceride level &gt; 250 mg/dl</td>
<td>• High-risk race/ethnicity</td>
</tr>
<tr>
<td>• Polycystic ovarian syndrome (PCOS)</td>
<td>• Signs of insulin resistance</td>
</tr>
<tr>
<td>• A1C ≥ 5.7</td>
<td>• Acanthosis nigricans</td>
</tr>
<tr>
<td>• Severe obesity</td>
<td>• Hypertension</td>
</tr>
<tr>
<td>• Acanthosis nigricans</td>
<td>• Dyslipidemia</td>
</tr>
<tr>
<td>• History of Cardiovascular disease</td>
<td>• PCOS</td>
</tr>
<tr>
<td></td>
<td>• Small-for-gestational-age birth weight</td>
</tr>
<tr>
<td></td>
<td>• Maternal history of diabetes or gestational</td>
</tr>
<tr>
<td></td>
<td>diabetes during the child’s gestation</td>
</tr>
</tbody>
</table>

*In the absence of the above risk factors for adults, testing for diabetes should begin at age 45 and repeated at least every three years.

The ADA recommends that “screening should be carried out within the health care setting.” While shopping mall and convenience store screenings are obviously not health care settings, it is APhA’s belief that pharmacies are health care settings and pharmacists are clinicians. Thus, when pharmacists are conducting screenings in pharmacies as part of a comprehensive patient care initiative, it is entirely appropriate for pharmacists to screen high-risk patients in pharmacies.

APhA position statement on pharmacy-based screening and monitoring services are as follows:

1989 Pharmacy-based Screening and Monitoring Services
APHa supports pharmacy-based screening and monitoring services instruction within pharmacy curricula and continuing education programs. APhA supports projects that demonstrate and evaluate various pharmacy-based, screening and monitoring services. (Am Pharm. NS29(7):463. July, 1989)

Therefore, to ensure that pharmacists are providing the best possible care for the patients that they serve, and to ensure that Operation Diabetes is conducted in a manner consistent with the 2012 ADA Clinical Recommendations, APhA recommends that Operation Diabetes events be conducted in the presence of a pharmacist or in a pharmacy. APhA further recommends that APhA-ASP chapters use the ADA Screening Test referred to in table 7, to identify those patients who are at high risk for the development of diabetes.

The provision of patient information to all patients seeking screening is entirely appropriate in an effort to broaden the understanding of diabetes and its complications, and APhA-ASP chapters are encouraged to work with local ADA chapters, their state and local pharmacy associations, local pharmacies, and their local health departments to have written patient education materials available during screening events.
So what does all of this mean for you and your Operation Diabetes projects? It means that providing patients with information about lifestyle changes (appropriate diet and exercise) is an extremely beneficial way for you and your school to impact the health of the community in a positive way! Educating adults and children with diabetes or at risk for diabetes is just as important as the screening programs. Additionally, educating day care providers, teachers, etc. who interact with children who have diabetes or at risk for diabetes is another step your chapter can do in the fight against diabetes. Remember, simple lifestyle changes are the most effective way for individuals to gain control of their diabetes.

**Diabetes Complications: More than Just High Blood Sugar**

Virtually every major system of the body is affected by diabetes. In the next several paragraphs, some of the major complications of diabetes will be discussed. Patients with diabetes need to have a clear understanding of these complications so they recognize the importance of keeping their blood glucose under control.

**Cardiovascular disease (CVD)**

Cardiovascular disease (CVD) is the major cause of morbidity and mortality in diabetics. Two common conditions that typically coexist with type 2 diabetes are hypertension and high cholesterol, which are both risk factors for CVD. Excessive glucose in the vascular system leads to an increased risk for heart attack and stroke. In fact, adults with diabetes have heart disease death rates about 2 to 4 times higher than adults without diabetes. The risk for stroke is 2 to 4 times higher among people with diabetes. Therefore, it is important to ensure patients’ blood pressure and cholesterol levels are controlled to prevent these co-morbid conditions. The ADA published specific goals for blood pressure and cholesterol for patients with diabetes that are consistent with their respective guidelines: JNC-7 (hypertension guidelines) and ATP III (cholesterol guidelines).

The recommendations for screening and goals include the following:

**Blood Pressure**

- Blood pressure should be measured at every routine diabetes visit (including screenings).
- Blood pressure should be <130/80 mmHg. For patients *without* diabetes, their goal is <140/90.
- When measuring blood pressure, keep the following tips in mind:
  - Patient is in the seated position, with feet on the floor and arm supported at heart level, after 5 minutes of rest. Legs should not be crossed.
  - Ensure cuff size is appropriate for the upper arm circumference
  - Ensure the patient has not consumed a large volume of fluids prior to checking their blood pressure.
  - If you get an abnormally high reading, repeat the blood pressure
- Lifestyle therapy following the Dietary Approaches to Stop Hypertension (DASH)
  - Reduce sodium to <1500 mg/day and excess body weight
  - Increase consumption of fruits and vegetables to 8 – 10 servings/day and low-fat dairy products to 2 – 3 servings /day
  - Avoid excess alcohol
  - Increase activity level to 150 minutes/week
• Treatment- Recommended therapy for patients with diabetes and hypertension is typically with a regimen that includes either and ACE inhibitor or an ARB.

**Dyslipidemia**

- In adult patients, fasting lipids should be measured at least annually or every 2 years if they are considered low-risk (LDL <100 mg/dL, HDL >50 mg/dL, and triglycerides <150 mg/dL).
- Lipid goals
  - LDL goal < 100 mg/dL; patients with overt CVD, LDL goal < 70 mg/dL
  - Triglyceride goal < 150 mg/dL
  - HDL > 40 mg/dL in men and HDL > 50 in women
- Lifestyle modifications:
  - Reduction of saturated fat, trans fat, and cholesterol intake
  - Increase consumption of omega-3 fatty acids, viscous fiber, and plant stanols/sterols
  - Weight loss (if indicated)
  - Increased physical activity
- Treatment- Recommended statin therapy should be added for diabetic patients with overt CVD, those over age 40 years, and those that have one or more other CVD risk factors

*Special note: Pharmacologic recommendations would need to be made to the primary care provider, but in the pharmacy setting patients can be educated about lifestyle modifications.*

**Aspirin**

Aspirin has been shown to be effective in reducing cardiovascular morbidity and mortality in high-risk patients with previous myocardial infarction or stroke (secondary prevention); therefore it is recommended for diabetics with a history of CVD. The dose recommended is 75 – 162 mg/day, with most patients taking an 81 mg “baby aspirin.” It is APhA’s recommendation that the patient consult his/her physician before starting a daily aspirin regimen.

**Smoking cessation**

Numerous studies have shown a link between cigarette smoking and health risk. Diabetics who smoke have a higher risk of CVD, premature death, and increased rate microvascular complications. Smoking may have a role in the development of type 2 diabetes. Pharmacists can play an important role in diabetes care by providing smoking cessation counseling and by advising all patients not to smoke.

**Nephropathy**

Diabetic nephropathy, a term used to describe damage to or disease of the kidney, occurs in 20 – 40% of patients with diabetes and is the single leading cause of end-stage renal disease. Consistently elevated blood glucose concentrations damage capillaries and over time, more and more capillaries lose their ability to filter out harmful substances from the blood. The progressive deterioration of kidney function can ultimately result in end-stage renal disease (ESRD), the complete loss of kidney function. ESRD is very serious, resulting in the dependence of dialysis and eventually requiring a renal transplant. In 2008, a total of 202,290 people with end-stage kidney disease due to diabetes were living on chronic dialysis or with a kidney transplant. To reduce the risk or slow the progression of nephropathy, the best option is to optimize glucose and blood pressure control. Even small rises in blood pressure can result in a significantly increased risk for development of kidney disease. Effective drug therapies exist to treat both conditions and recent studies indicate that the classes of hypertension medications which work on
the angiotensin-renin system (ACE-I and ARB’s) provide protective benefits for the renal system, even in patients without hypertension.

**Retinopathy**

Diabetes is the leading cause of new cases of blindness among adults aged 20 to 74 years. Retinopathy is a general term that refers to some form of non-inflammatory damage to the retina of the eye. Both retinopathy and blindness are major vascular complications of diabetes with prevalence strongly related to the duration of diabetes. Risk factors for retinopathy include chronic hyperglycemia, the presence of nephropathy, and hypertension. Therefore, it is best to inform patients that by achieving optimal glucose and blood pressure control they can reduce their risk or slow the progression of developing retinopathy. To prevent more severe forms of retinopathy and blindness, patients must have regular visits to an eye care professional. The following table, adapted from the ADA 2010 Standards of Medical Care, outlines when patients with diabetes should receive a routine eye care exam.

<table>
<thead>
<tr>
<th>Table 8 – Ophthalmologic Examination Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Group</td>
</tr>
<tr>
<td>Type 1, ≥ 10 years old</td>
</tr>
<tr>
<td>Type 2</td>
</tr>
<tr>
<td>Women with preexisting diabetes who are pregnant</td>
</tr>
</tbody>
</table>

*Abnormal findings necessitate more frequent follow-up.

**Neuropathy**

About 60% to 70% of people with diabetes have mild to severe forms of nervous system damage (neuropathy). The results of such damage include impaired sensation or pain in the feet or hands, slowed digestion of food in the stomach, carpal tunnel syndrome, erectile dysfunction, or other nerve problems. Prolonged hyperglycemia can upset the normal mechanical and chemical processes within a cell. In a neuron, normal signaling may be impaired as a result of excess glucose. Also, persistent hyperglycemia can damage blood vessels resulting in ischemia, a lack of blood supply to surrounding tissues, leading to pain and ultimately tissue death.

Severe forms of diabetic nerve disease are a major contributing cause of lower-extremity amputations. This is a result of peripheral neuropathy characterized by a loss of sensation in the extremities (particularly feet) caused by damaged nerve cells. Neuropathy is also associated with genitourinary tract disturbances. In men, erectile dysfunction and/or retrograde ejaculation can occur. In women, urinary tract infections can occur, and they should seek treatment if they notice any pain or burning upon urination, if they notice a change in color or odor of their urine, are having lower back pain, experiencing a fever, or notice blood in their urine. Urinary tract infections can be minimized by purposeful voiding during waking hours every 3 to 4 hours. Control of blood glucose is the best therapy; however, pharmacologic therapy for neuropathy is warranted in some cases. If a patient complains of any of the above symptoms, it is best to provide education and refer them to their primary care provider.
Foot care
An annual foot exam is recommended for all patients with diabetes to identify risk factors. The exam consists of a visual inspection, assessment of foot pulses, and testing for loss of sensation using a 10-g monofilament test. General foot self-care education can be provided at screening events. Key points on educating patients on proper foot care include the following:

- Monitor feet on a daily basis (look for ulcers, cuts, feel for possible loss of sensation)
- Proper care of feet, including nail and skin care: keep nails clean and trimmed; do not use lotion between toes; only use hypoallergenic, fragrance-free lotion on the skin to prevent irritation.
- Wear appropriate footwear: well-fitted walking shoes or athletic shoes that cushion the feet and redistribute pressure.
- If you notice a wound or ulcer on their feet, refer them to a podiatrist.

Vaccine preventable diseases
As the disease progresses, an increased risk of infections become a greater concern for diabetic patients. Diabetes can affect the vascular system causing impaired blood flow as well as tissue damage. Impaired blood flow can decrease the effectiveness of the immune system. Of particular concern are influenza infection and pneumococcal disease. Both of these infections can be deadly in patients with a compromised ability to respond to infections. Therefore, it is recommended by the CDC that patients with diabetes of any age receive an annual influenza vaccination and pneumococcal vaccine. The pneumococcal vaccine is necessary only once before a patient turns age 65, and then again only once after age 65 if it has been at least 5 years since the first pneumococcal vaccine. The CDC now recommends all patients < 60 years of age with Diabetes receive the 3-series Hepatitis B vaccine. Patients > 60 years are at the discretion of their primary care provider. The zoster vaccine is recommended as a one-time dose for all patients over the age of 60 years. The zoster vaccination will prevent against herpes zoster commonly referred to as shingles. Refer to the latest vaccine schedule for adults at http://www.cdc.gov/vaccines/schedules/

Periodontal (Gum) disease
Gum disease is more common in people with diabetes. Among young adults, those with diabetes have about twice the risk of those without diabetes. Gum recession (or loss of attachment of the gums to the teeth) and gingivitis are both extremely common in diabetics. The breakdown of the gums and bone structure of the tooth can, however, be prevented. Patients should be instructed in proper brushing and flossing technique, and should be seen by their dentist at least biannually. Toothbrushes with soft bristles should be used, and should be replaced every 3 to 4 months or sooner if the bristles become bent.

Skin disorders
A variety of skin disorders may occur in the patient with diabetes. Patients should be instructed in a number of skincare areas to ensure proper health. People with high glucose levels tend to have dry skin and less ability to fend off harmful bacteria. Both conditions increase the risk of infection. Below are tips used in proper skin care that you can provide to patients you are screening.

- Keep skin clean and dry to prevent yeast infections. Use talcum powder in areas where skin touches skin, such as armpits, under breast, and groin.
- Avoid very hot baths and showers. If your skin is dry, don't use bubble baths. Moisturizing, mild or fragrance-free soaps, such as Dove or Basis, may help. Afterward, use an oil-in-water skin
cream, such as Lubriderm or Alpha-Keri. But don't put lotions between toes. The extra moisture there can encourage fungus to grow.

- Prevent dry skin. Scratching dry or itchy skin can open it up and allow infection to set in. Moisturize your skin to prevent chapping, especially in cold or windy weather.
- Treat cuts right away. Wash minor cuts with soap and water. Do not use Mercurochrome antiseptic, alcohol, or iodine to clean skin because they are too harsh. Only use an antibiotic cream or ointment that has been approved by your primary care provider. Cover minor cuts with sterile gauze. Seek medical attention right away if you get a major cut, burn, or infection.
- During cold, dry months, a humidifier or vaporizer may help to increase moisture in the home, thus help with dry skin. Bathe less during this weather, if possible.
- See a dermatologist about skin problems if you are not able to solve them yourself.
- Take good care of your feet. Check them every day for sores and cuts. Wear broad, flat shoes that fit well. Check your shoes for foreign objects before putting them on.
- Acanthosis Nigraicans, a condition in which tan or brown raised areas appear on the sides of the neck, armpits, and groin can occur. Typically this erupts in people who are obese; therefore the best treatment is to lose weight.

References

All educational guidelines and principles are adapted from:


Centers for Disease Control and Prevention. Vaccine Schedules. Available at: http://www.cdc.gov/vaccines/schedules/

United States Department of Agriculture, Nutrition recommendations. Available at: ChooseMyPlate.gov
The following pages will serve as an example outline for planning and implementing your APhA-ASP Operation Diabetes events. Please use this only as a guide and adjust the suggestions based on the needs of your chapter.

Getting Started

As the Project Coordinator, the first step to implementing a successful event is to schedule a meeting with your APhA-ASP Chapter Advisor, other interested faculty, and your APhA-ASP chapter officers to set chapter goals for your chapter to accomplish through the Operation Diabetes. This meeting will give you an opportunity to discuss your ideas, brainstorm, and set the direction of your Operation Diabetes events. Preparation should begin at least 6 weeks before the patient care project occurs.

The process of recruiting students to participate should start early to increase the opportunities for participation. You can hold an interest meeting to outline projects and brainstorm. The interest meeting will offer you the opportunity to assess student interest and begin forming committees. Forming committees will increase involvement and encourage participation in future events. These committees can be responsible for areas such as promotion, advertising, training, documentation, and reports. Each committee will have specific tasks and responsibilities. An example of the specific duties of each of these committees is outlined later in this section, and as stated above you can tailor the number and responsibilities of these committees to fit your chapter needs.

Project Organization

Screening days can be conducted throughout the year and can be held in conjunction with other events and patient care projects. Hosting multiple patient care projects at one time allows you to offer screenings for multiple disease states to patients at one event and capitalize on the time of volunteers. Don’t forget November is National Diabetes Month, and is a great time to promote the profession. Continue utilizing the Operation Diabetes planning guide materials and establish a timeline to facilitate your planned screening and education day.

Enlist the support of a faculty project advisor (e.g. either the APhA-ASP Chapter Advisor or another interested faculty member). Your faculty project advisor can assist you in coordinating a training session, and also be a supportive contact in case you encounter challenges during the project. The faculty project advisor will need to be well informed about the activities going on with the project in order to help ensure the project’s success.

Begin developing your media contacts in the community. Also contact your pharmacy association to see if they are interested in becoming involved with your project. Allow yourself approximately 2 weeks to complete your project organization, and don’t forget to utilize your committees.

Pharmacist Recruitment & Initial Publicity

Pharmacists have been continually recognized as one of the most approachable healthcare providers, and you are at an advantage for finding these practitioners to participate in the event. During this two-week period, you will need to identify the pharmacists who are interested in participating. Meet with these individuals to discuss the campaign and review plans for implementation of the campaign. The
pharmacists will need to be present on the day of the event and can assist students if they have any questions. You can look to your Chapter’s New Practitioner Mentor for assistance as well.

This is also the time to start contacting radio and TV show producers and send a “pitch” letter indicating you would like an interview to promote this community service project. A pitch letter is used to introduce yourself to an editor or producer and suggest story ideas. You can find information about pitch letters and other media tools in the “Promotion” section of this planning guide.

Mass Publicity and Supply Procurement

To ensure the success of your event, getting the word out to the public is a vital part of the project. You will make your big advertising push to the public starting about 4 weeks prior to the event. Get your posters and flyers out to the identified locations, and make follow-up phone calls to media outlets to arrange interviews. Get in touch with local newspapers, radio, and TV stations to inform them about your event and when it will occur. Invite the public to attend. Another great tool to reach patients is a radio public service announcement (PSA). Deliver the PSA to the public service director of the stations. Contact the venue to find out what supplies and equipment are available. Work with your committees to ensure that the appropriate supplies have been ordered to provide diabetes education and screening services to patients. Use new and innovative ways to reach your target audiences, such as your chapter website. Be sure to check out the health literacy resources at www.pharmacist.com/students.

Final Preparation

Now that you are in the homestretch, keep in touch with media contacts, and distribute literature throughout the community. Send news releases to local newspapers if they are not planning to run a feature article on the project. Make copies of fact sheets, consent forms, surveys, and all other documentation forms and handouts to be distributed at the screening site.

Help your faculty advisor organize a training session to review diabetes information and details about the screening. Have the faculty advisor refer to the introduction section to see the educational material provided. The training session can take place during your lunch hour or another time that is convenient for students participating in the event. Topics for the training session should cover an overview of the disease state and how to perform blood glucose screenings. The Operation Diabetes event is also a great time to help your patients fill out a Personal Medication Record along with their diabetes screening form that they can take home, and the training session is a great time to familiarize student pharmacists with the form. The American Diabetes Association also has great resources for practitioners and patients that can be utilized during your event; some of their forms are available in different languages.

Day of the Project

Implement Operation Diabetes! Hand out the literature you’ve prepared, discuss diabetes and associated risk factors, and conduct screenings for participants. Radio stations should be running the PSAs as well as other advertisements. Newspapers should run stories covering your event this week. TV interviews should discuss the event and invite the public.

You are now prepared to increase the public’s awareness about diabetes. The event is an extension of your recent media campaign, and gives you the chance to personalize the education to the public.
Distribute handouts, information sheets, and other patient advocacy information on diabetes at the location where the screening services are being provided. Through education information and blood glucose screenings, student pharmacists can assist the patients in effectively treating and relieving their diabetes symptoms.

**Post Event Follow-Up and Report Submission**

Send out “Thank You” notes to all the individuals who assisted in making the project a success. Be sure to keep a reference log of all contact names and numbers to assist in future patient care projects. The log can be of great assistance to future project coordinators, and will also be useful for your other patient care projects. Complete a project report on your Operation Diabetes activities and send into APhA headquarters. Reports must be submitted electronically by July 15. Late reports will not be accepted for award consideration. Awards will be presented during the APhA-ASP Opening General Session at APhA Annual Meeting & Exposition. (See “Reporting Guidelines” for more details.)

**Project Coordinator Checklists**

The checklists below are provided as an example for the Project Coordinator to follow. The individual tasks can be assigned to committees and adjusted to fit the project’s needs. These timelines are suggestions and should be modified to fit the needs of your events.

*Six Weeks to Target Date*

** Begin 6 weeks prior to target date, and allow 2 weeks to complete

___ Hold a meeting with your APhA-ASP Chapter Advisor, faculty advisor, and chapter officers to discuss your goals for the event.

___ Hold a student interest meeting to overview projects and brainstorm on event dates and locations.

___ Select a target date and location.

___ Form working committees and outline the tasks of each for your specific needs.

___ Develop a list of names, addresses, phone numbers, fax numbers, and e-mail addresses of media contacts in your community.

___ Contact your state pharmacy association to participate in the campaign; place advertisements and articles describing Operation Diabetes in your state pharmacy journal.

*Four Weeks to Target Date*

**Begin 4 weeks prior to target date and allow 2 weeks to complete

___ Identify and meet pharmacists and your New Practitioner Mentor who will participate to discuss the campaign and review plans for implementation of the campaign.
ACTION PLAN

Identify radio and TV show producers; send information on Operation Diabetes with a “pitch letter” indicating you would like an interview to promote this community service project.

Contact state/local health departments to inform them of Operation Diabetes and your planned activities.

Send out education and screening day sign-up sheets to students.

Produce promotional flyers and a promotional display for the event site.

Identify a source for all equipment necessary for the event and order as needed.

Two Weeks to Target Date
**Begin 2 weeks prior to target date and allow 1 week to complete

Distribute posters and flyers to event target locations (pharmacies, senior centers, community centers, grocery stores, office complexes, etc.) advertising when and where diabetes education and screening services will be provided.

Make follow-up phone calls to radio and TV producers to arrange an interview to discuss Operation Diabetes.

Send out a media advisory to local newspapers, radio, and TV stations.

Enlist a faculty member to perform a 1-hour basic training session for all participating student pharmacists.

One Week to Target Date
**Begin about 1 week prior to target date and allow 1 week for completion

Continue follow-up contacts and distributing flyers and posters throughout the community.

If local newspapers are not planning to run a feature article on the project, send a news release to them detailing Operation Diabetes.

Make copies of fact sheets, consent forms, surveys, and any other documentation forms and handouts to be distributed at the screening site.

Remind participating students to wear lab coats, name tags, and professional attire to the screening event.

Operation Diabetes Event Day
**Deliver equipment and have it set-up at least ½ hour before the event.

Hand out brochures, bag stuffers, information sheets, and other patient advocacy information on diabetes at the locations where diabetes education and screening services are being provided.
ACTION PLAN

___ Radio stations should be running the PSAs as well as other Operation Diabetes advertisements.
___ Newspapers should run stories covering Operation Diabetes this week.
___ TV interviews should be discussing Operation Diabetes and inviting the public to attend.
___ Collect all documentation and assessment forms; complete the screening summary results form.
___ Clean up and return equipment as needed at the conclusion of the event.

Post Event Follow-Up and Report Submission
**Within one week after project

___ Send out “Thank You” notes/letters to:
    ___ All media outlets that covered/promoted the event
    ___ All business locations that promoted the event
    ___ Pharmacists and other health care professionals involved in the campaign
    ___ Your school Dean, faculty, advisor, and other supporters
    ___ State and local pharmacy associations that promoted the event

___ Complete a project report on your Operation Diabetes activities and send into APhA headquarters for award recognition judging. Reports must be submitted electronically to the FTP site no later than 11:59pm July 15. Late reports will not be accepted for award consideration under any circumstance.
Operation Diabetes—Committee Outline

Promotions Committee Assignments

Action Items:
1) Select committee chairperson.
2) Select committee members.
3) Assign committee tasks to members for action.

Specific Tasks:
1. Seek out support of state and local pharmacy associations and the state board of pharmacy.
   - Find out the names of key contact persons (i.e. executive director, president, etc.) and when the next organizational board meeting will be held. Ask to be placed on the agenda to inform the group of the Operation Diabetes campaign and ways in which they can assist your chapter.

2. Prepare an outline to present at these meetings.
   - Remember to tailor it to the target audience because each organization will likely play a different role.
   - Your state pharmacy association may provide names of pharmacists/pharmacies that are interested in participating in the Operation Diabetes campaign. Additionally, they may be able to provide publicity support through the association’s journal or newsletters.
   - The board of pharmacy should be made aware of your project plans to ensure compliance with all state pharmacy laws and regulations.
   - Compile a list of all contact persons identified in this step that can be shared with the advertising committee. Each of your key organization contact persons should be provided with copies of all consumer advertising materials and kept abreast of your promotion and event activities so as to maximize your support from these organizations.

3. Attend meetings and ask for support from these organizations.
   - It is your responsibility to make sure enough pharmacists are at the event, so make sure you have commitments from pharmacists to participate.
   - Most events will require at least two pharmacists at all times.

4. Meet with pharmacists and other health care professionals who have committed to assist with your project.
   - Provide more detail to them on the Operation Diabetes presentation and your project. Ask for their ideas and suggestions on how to make your project even more successful.

5. Encourage chapter members to participate.
• Dedicate time at a chapter meeting early in the planning period to promote participation in Operation Diabetes to general members.

• Ask interested members to sign up so that they can be included in the planning process.

• Send out education and screening day sign-up sheets to the students 2 to 4 weeks before the event.

• You will need enough students to counsel the patients with a reasonable waiting time. Each patient will need 5-10 minutes of one-on-one time with a student pharmacist. Try to get an estimate of patients attending and plan to have enough students to counsel. Remember to enlist enough student assistance for set-up (½-hour before) and clean-up (½-hour after). Remind chapter members that providing patient counseling is a way to practice providing Medication Therapy Management.

• Ask students to sign up to participate and provide them with the educational material included in the “Student Pharmacist Education” section of this guide.

• Only enlist students for education and screening shifts if they have completed training conducted by the training committee on the proper patient education/counseling techniques.

6. Ensure appropriate education.
• 1 to 2 weeks before the event, organize a time with your faculty advisor to have a 1-hour informational session for all participating students, provide an overview of diabetes education and screening recommendations, and to prepare the students to answer questions they may receive.
Operation Diabetes—Committee Outline

Advertising Committee Assignments

Action Items:
1) Select committee chairperson.
2) Select committee members.
3) Assign committee tasks to members for action.

Specific Tasks:

1. Keep in communication with the Promotion Committee.
   - Get a list of the people to contact at the state and local pharmacy associations, and board of pharmacy from the promotion committee.
   - Once the contacts have been established, begin to communicate with these organizations to learn of ways they may be able to assist you in getting the word out to the public about your Operation Diabetes event. For example, they may already have established contacts with local newspapers, radio, and television stations. Ask the organizations for their help with advertising. They may be able to assist in preparing press releases or in getting ad placement in key newspapers.

2. Consult with pharmacists who have committed to be a part of your project.
   - The Promotion Committee should be able to provide you with the names of those who have committed. Ask these pharmacists for their assistance in brainstorming ideas for promotion of the event to the public.
   - These pharmacists may also be able to distribute bag stuffers or flyers with each prescription they dispense or with each front-end pharmacy sale. They may also be willing to post flyers or posters in their pharmacies as a way of promoting your upcoming event.

3. Produce promotional materials.
   - Materials should be designed for your event.

4. Start posting promotional materials at least 2 weeks prior to the event.
   - If your education and screening site is a pharmacy or other retail outlet, be sure to provide an extra supply of materials for distribution to every patient and customer of the store.

5. Work with pharmacy organizations to aggressively inform the media of the event.
   - Submit press releases, develop public service announcements for radio and TV stations, and arrange interviews with radio, newspaper, and TV reporters 1 to 2 months before your event if possible.
• Try to get TV coverage on the day of your event by inviting local celebrities to take part in the Operation Diabetes education and screening day.

6. Continue to advertise on the radio and television all the way up to the day of the event.

• Follow up regularly with the pharmacy organizations and the media to inform them of your progress. Keep trying, sometimes the media cannot commit until the last minute, and be prepared in case they show up without notice.

7. Create a promotional display.

• Create a promotion exhibit on a laptop, corkboard (bulletin board) or poster board to display at the site the day of the event to attract people passing by the event.
Operation Diabetes—Committee Outline

Site and Equipment Committee Assignments

Action Items:
1) Select committee chairperson.
2) Select committee members.
3) Assign committee tasks to members for action.

Specific Tasks:

1. Determine a location for the education and screening site.
   - The Promotion Committee should be able to provide contact information of pharmacists interested in participating in the event. The pharmacists should be consulted for recommendations of host sites.
   - Talk to faculty, local pharmacists that may not be participating in the event, and fellow students about any site that may be available for use.
   - You will need a site large enough to accommodate 3 to 4 tables, 10 student pharmacists, and 2 pharmacists at any given time during the education and screening event.
   - Adequate space for patients that does not interfere unnecessarily with the site’s business operations is also required, as well as for patient privacy.

2. Identify a source for all equipment necessary to perform your Operation Diabetes project and acquire equipment. Depending upon the nature of your event, additional items may be necessary and some recommended items may be unnecessary for your particular event.

Sample Checklist:

___Four, 6-foot tables
___20 folding chairs
___Pens, markers and pencils
___3 or more blood glucose monitors
___Lancets
___Alcohol prep pads
___Vinyl gloves in appropriate sizes
___6 waste receptacles
___3 sharps containers
___Adhesive bandages
___Cotton balls
___Brochures
___Patient education materials
___Hand sanitizer
___Contact information for patients

3. Deliver equipment and set-up the day of the event. Tear down and return equipment at the conclusion of the event.
Operation Diabetes—Committee Outline

Training Committee Assignments

Action Items:
1) Select committee chairperson.
2) Select committee members.
3) Assign committee tasks to members for action.

Specific Tasks:

1. Consult with the Promotion Committee and find out the date of the event, as well as the names of all pharmacists who have committed to participate in the event. Find out the names of all students who have been enlisted to assist with the event.

2. Enlist a faculty member (either the chapter advisor or another faculty member) to perform a 1-hour basic training session for all participating student pharmacists.
   - Training should occur 1 to 2 weeks prior to the scheduled education and screening event. The faculty member should provide an overview of the education and screening tools, recommendations, how to help a patient fill out a personal medication record (this is Medication Therapy Management!), and proper use of the selected blood glucose monitors and lancet devices. Appropriate sharps disposal procedures should also be reviewed. Invite participating pharmacists to attend the educational session as well.

3. Provide participating pharmacists with copies of all patient education materials that have been acquired by the Site and Equipment Committee.
   - Also provide the participating pharmacists with a listing of all students who will be participating in the event and information on the types of devices that will be used for screening. Determine from the pharmacist if he or she needs any additional information before the education and screening event.

4. Remind participating students to wear lab coats, nametags, and professional attire to the education and screening event.
   - This is for the purpose of projecting a professional image to patients, pharmacists, professional association representatives, and media representatives that may be present for the event.
Operation Diabetes—Committee Outline

Documentation Committee Assignments

Action Items:
1) Select committee chairperson.
2) Select committee members.
3) Assign committee tasks to members for action.

Specific Tasks:

1. Photocopies
   - Make at least 150 copies of the patient consent form and any other handouts.
   - Make at least 75 copies of the patient assessment form per education and screening/event location (refer to “Forms” section).
   - Make at least 75 copies of the personal medication record form per education and screening/event location (refer to “Forms” section).
   - Consult with participating pharmacists and the Advertising Committee to gauge whether additional copies beyond the recommended number may be necessary.
   - Make several copies of the patient assessment for the student pharmacists to keep for each education and screening/event location (enough for at least 75 patient screenings).

2. Collect all documentation and assessment forms at the conclusion of the event (refer to “Forms” section).

3. Complete the summary log form and summary survey form; submit the form with the Chapter Operation Diabetes Report. All reports are due to APhA Headquarters by 11:59pm EST on July 15.

4. Send thank you letters to:
   - Participating pharmacists
   - Participating/supporting faculty members and administration
   - Local supporters
   - Participating organizations (i.e. local and state associations)
   - Participating student pharmacists
   - Site host(s)
   - Media contacts that provided event coverage
**Operation Diabetes—Committee Outline**

**Project Report Committee Assignments**

Action Items:
1) Select a committee chairperson, who will also serve as the person responsible for assembling the final report for submission to APhA Headquarters.
2) Select committee members. The committee should be made up of one representative from all activity committees (i.e. Promotion, Advertising, Site and Equipment, Training, and Documentation Committees).
3) Assign committee tasks to members for action.

Specific Tasks:

1. Each representative from the aforementioned committees should provide the committee chair with details necessary to complete the chapter’s final project report to APhA Headquarters.

2. Remember, your chapter will be considered for an award and recognition based upon the details provided in your report, so try not to leave any important details out of the report. Include photographs, copies of news clips, and supporting letters if possible. Please refer to the “Reporting Guidelines” for detailed submission instructions.

3. All reports MUST be submitted electronically via the APhA-ASP FTP site no later than 11:59pm July 15.

4. Reports that are received after July 15 will not be considered for awards.

5. Chapters that submit their report on time will receive a plaque of recognition for participation.

6. Awards will be presented during the APhA-ASP Opening General Session at the APhA Annual Meeting & Exposition.
Promotional Guide

A number of materials are provided in this manual to assist with public promotion and media promotion efforts related to Operation Diabetes. These can be used verbatim or as a guide. You may also feel free to create unique materials that fit your event more specifically. Many of the techniques discussed here can be applied when trying to promote pharmacy services, especially those that involve medication therapy management.

The importance of repeatedly saturating a clear, concise, and consistent message through a variety of mechanisms cannot be overstated. Some have estimated that it takes the average individual 6 to 8 times of hearing or seeing something before they really “hear” or “see” it. It then takes individuals 3 times of “making a decision” to actually act on their decision. In other words, they may see a flyer in the pharmacy window, get a flyer in their prescription bag, hear a public service announcement on the radio, hear it from a friend, read an advertisement twice in the newspaper, and see spots on television about the importance of attending your diabetes screening event before they actually understand that it is good for them personally to attend your event. They then will have to be reminded as many as 3 times that they need to attend before they will show up! Of course, some individuals will be prompted to come after only one encounter with your promotional campaign, but if you really want to have great success, begin your campaign early and do not let up until the day of the event.

The “Action Plan” section of the guide provides several step-by-step examples of how and when to begin your Operation Diabetes promotional campaign. The following is a list mechanism to consider when getting the word out about your programs:

- Promotional flyers handed out in public places.
- Promotional flyers hung in windows and on walls of public buildings.
- Bag stuffers in the pharmacy.
- Statement stuffers for pharmacies with revolving credit accounts.
- E-communications through chapter or school website.
- E-communications through social media sites.
- Advertisements in local newspapers.
- Advertisements in campus newspaper.
- Press releases to newspapers and local magazines.
- State pharmacy association journal stories/advertising.
- Flyers distributed by wholesalers to pharmacies in the area of the event.
- Public service announcements for local radio and television stations.
- Schedule an interview with local television health correspondents.
- Schedule an interview with local radio talk show hosts.
- Give a presentation on your event and on the subject of diabetes for local civic organizations (Kiwanis, Rotary, JayCees, Lion’s Club etc.).
- Provide posters to local churches/synagogues/houses of worship, and ask for event announcement to be placed in newsletters/bulletins.
- MUCH, MUCH, MORE! Be creative and utilize the talents of your chapter members!
Know Your Media Contacts

The media outlets can be an integral part of your diabetes education program. With the media’s help, the message about diabetes can reach a larger audience. Also keep in mind that media outlets may be interested in more than just publicity. Many large-scale, community-based health programs have been co-sponsored by a local newspaper, magazine, radio station, or TV station.

- Most of the activities in this guide involve working with the media. If you do not know any media contacts, begin by calling your local or state pharmacy association to see if they have contacts they can provide. APhA has also created a network of media advisors. To find out whom the media advisors in your area are, contact the External Communications department. You may also begin scanning the newspapers and monitoring radio and TV shows to learn the names of reporters who cover health topics. Learn the names of public affairs directors of radio and TV stations. Acquire names, phone and fax numbers for each contact. When you call or visit the people on your media list, ask about deadlines, special interests, and informational needs.

- Whenever you can, arrange to meet face-to-face with reporters, editors, and producers. Bring your article, news release, public service announcements, or any other materials you want them to consider. Bring background information if you are asking them to cover an event. Be sure to leave your business card or phone number.

- In general, media outlets (television, newspaper and radio) are inundated, especially in major metropolitan areas, with organizations trying to get their story on the air or printed. You must realize that you are competing for time and space, and your story has to be good and of real value to the readers or listeners. Simply promoting your APhA-ASP chapter and the event in and of itself will likely not be effective. However, if you can clearly define the risk of diabetes, the complications, and demonstrate the need to be screened, then you may be able to make a case that your event is newsworthy.

- Daily newspapers are a good source of publicity, and other sources that should be considered include weekly newspapers, local or regional magazines, newsletters of Chambers of Commerce, fraternal groups, health maintenance organizations, hospitals and clinics, senior citizens centers, medical organizations, local high school or college publications, church and synagogue bulletins and newsletters, billboards, and public and private transportation signs.

- Identify local pharmacists and experts for the reporter to interview, and provide their names and phone numbers. These spokespersons must be knowledgeable, able to stay focused on the message, and be available for media phone calls. It is helpful to have range of people on this source list; for example, a high-ranking public health department official, a health care provider, and a supportive elected official. Make sure that you have spoken with these contacts and mentioned the tight deadlines and time constraints of reporters. Phone calls must be taken when the reporter calls, or the contact must respond to the reporter as soon as possible. If they cannot work in this time frame, find another contact for the media.

- Be aware of information presented to reporters. Everything said is "on the record" and can be quoted - even those supposed “off the record” comments.
• Develop a question and answer document for your spokespeople that anticipates the questions a reporter may ask and suggested responses. This will enable those taking calls to be better prepared to handle media inquiries. This is an internal document that should not be distributed to reporters.

• Select a dedicated, articulate, and available representative from your APhA-ASP chapter to serve as your media representative. Media contacts should have no doubt or confusion as to exactly who is the point person for media inquiries. Respond to inquiries and informational requests from reporters as quickly as possible. If you cannot take the call immediately, at least do so within the hour, or at the very latest within the day. Do not wait to return calls; reporters have to meet deadlines. If deadlines are missed, the intended message will not be included in stories and you will have missed your opportunity.

• You may be asked by a fact checker or by the author himself to review various facts for the story after it is written and before it is published. Do not be overly critical when commenting back to the reporter, their job is to write stories. If the facts are correct in the story, then compliment the reporter and make no changes. It would be inappropriate to ask the reporter to include numerous additional details; they have probably written the article based upon space constraints. It is entirely appropriate to correct misinformation. Be sure to call and thank the reporter after an article is written. A thank you note would also be appropriate. This will put the organization's name in front of them one additional time and re-emphasize the issue, as well as establish a good relationship with the reporter.

• Maintain contact with editors and reporters, but only when future issues are newsworthy, have local impact, and are important to report. Do not wear out your welcome.

• Remember, a picture is worth a thousand words! Photographs with lively captions often have good chance of being used. Topics that might sound uninteresting to an editor literally take on life when accompanied by a photo. Photos make great follow-up releases, too. Use a short caption identifying the activity and people pictured. Video clips of previous events may also be useful for TV media outlets, and you may wish to invite TV and radio celebrities to actually be a part of your event as a way to get more coverage.

• You can also consider reaching out to the APhA Media Advisors Network. These pharmacists serve as a resource for journalists who are working on stories that involve improving medication use and advancing patient care by pharmacists. The network consists of academics, pharmacy policy experts, and pharmacists in a variety of professional practice settings including community, chain and hospital. Each media advisor is an APhA member, all have extensive knowledge of both over-the-counter products and prescription medications, as well as experience working with the media. Today, the APhA Media Advisors Network has more than 50 pharmacists around the country, including most major media markets. For more information regarding the APhA Media Advisors Network or to speak to an APhA Media Advisor, please call APhA External Communications at 202-429-7558.

Partnering for Better Health Care
Given the complexity of diabetes, Operation Diabetes provides an opportunity to partner with other health care professionals. To ensure the success of Operation Diabetes, it is important that
communications between all participating organizations and individuals are open and comprehensive. Below are tips on how to form partnerships with professional organizations, pharmacies, interdisciplinary organizations, health departments, and other parties who may be interested in supporting Operation Diabetes.

**Forming Partnerships with Professional Organizations**

1. In the beginning of this campaign a meeting should be held with chapter officers and advisors to discuss the planning and implementation of Operation Diabetes.
2. Take time to meet with the dean of your school or college of pharmacy and explain Operation Diabetes to gain his or her support of the campaign.
3. An Operation Diabetes committee will need to be formed with co-chairs, from APhA-ASP and any other participating organizations. Try to form an interdisciplinary partnership with nursing or medical students, or partner with another pharmacy organization on your campus.
4. Contact your local or state pharmacy association to ask for their support.

**Forming Partnerships with Interdisciplinary Organizations and Health Departments**

1. If student pharmacists are unable to perform certain screenings within your state, partnerships with local nursing or medical schools and public health departments can aid in advancing your campaign.
2. Operation Diabetes is a great way to get involved with the other health care professionals in your community. By working together, thousands of people can be screened and educated about the importance of cardiovascular health, which is the goal of this public health care initiative.

**Forming Partnerships with Pharmacists**

1. Contact local pharmacists to arrange a meeting where you can explain Operation Diabetes and the benefits that this campaign can have for their pharmacy.
2. If the pharmacy agrees to participate in Operation Diabetes, designate a specific person on the committee to be a contact person for that pharmacy. This person has an important role to ensure there is continuous communication between the pharmacy and the committee. This component will ensure a successful campaign.
3. Make sure to keep your chapter’s New Practitioner Mentor up to date with details about your Operation Diabetes Campaign.

**Sample Project Media Guide**

Finally, in the several pages that follow, sample media materials developed by the California Pharmacists Association for use during a diabetes screening event in a previous year are provided for your review. APhA-ASP thanks the California Pharmacists Association for the use of these materials as part of APhA-ASP’s national efforts with Operation Diabetes. Also note that any statistics used in this sample media guide may have changed since production, and the timeline is a suggestion only.
“Ask Your Pharmacist About Diabetes”

PROJECT
MEDIA GUIDE®

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# DIABETES SCREENING DAY PROJECT MEDIA TIMELINE

## OVERALL THEME/OBJECTIVE
Promote your Diabetes Screening Day through the media to encourage the public to attend local diabetes screenings and raise awareness about the importance of talking with a pharmacist.

## MATERIALS DEVELOPMENT
- “Calendar” Press Release
- “Media Advisory” Release
- Pitch Letter
- Media Lists

## CHECKLIST

<table>
<thead>
<tr>
<th>Task</th>
<th>Week</th>
</tr>
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<tbody>
<tr>
<td>Build media lists</td>
<td>Week of 9/25</td>
</tr>
<tr>
<td>Write “calendar” press release</td>
<td>Week of 9/25</td>
</tr>
<tr>
<td>Write pitch letter</td>
<td>Week of 10/2</td>
</tr>
<tr>
<td>Write 15-second Public Service Announcement</td>
<td>Week of 10/2</td>
</tr>
<tr>
<td>Send Public Service Announcement to radio</td>
<td>Week of 10/9</td>
</tr>
<tr>
<td>Identify patients, pharmacists, faculty members to serve as spokespeople</td>
<td>Week of 10/9</td>
</tr>
<tr>
<td>Send out “calendar” press release</td>
<td>Week of 10/16</td>
</tr>
<tr>
<td>Identify news media clip service</td>
<td>Week of 10/16</td>
</tr>
<tr>
<td>Make media follow-up calls</td>
<td>Week of 10/23</td>
</tr>
<tr>
<td>Write “media advisory” release</td>
<td>Week of 10/23</td>
</tr>
<tr>
<td>Send out “media advisory” release</td>
<td>Week of 10/23</td>
</tr>
<tr>
<td>Call news assignment desks to confirm receipt of the “media advisory” and determine interest in covering the event</td>
<td>Week of 10/30</td>
</tr>
<tr>
<td>Call news assignment desks one last time the morning of the event to determine their interest in attending the event</td>
<td>Week of 11/6</td>
</tr>
<tr>
<td>Send thank-you letters to participating media contacts and spokespeople</td>
<td>Week of 11/20</td>
</tr>
<tr>
<td>Gather media clips from news clip service</td>
<td>Week of 12/04</td>
</tr>
<tr>
<td>Submit final report to APhA headquarters</td>
<td>Week of 12/25</td>
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</tbody>
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MEDIA TOOLS

For this particular project, a media advisory, calendar release and written public service announcement will be your most important tools. Also included is information about writing a pitch letter.

Calendar Release

- The purpose of a “calendar” release is used to get your event placed in the community calendars of television and print (newspapers, magazines, etc.) media.

Creating the media database for your “calendar” release:

Television: Call the Public Service/Community Relations contact

Print Media: Call the “Community Calendar” contact.

Keep in mind that “event” calendars in your local newspapers often focus on entertainment, so be sure to clarify with your contact that this is a health event. Often times there are “health” sections in newspapers that list health screenings.

- Be sure to ask your contacts how they prefer to receive the information: fax, e-mail, or mail.

- Because of competing events and limited space, the media prefers to receive “calendar” releases at least 4-6 weeks prior to the event date. Be sure to send the “calendar” release out as soon as possible.

- Start your follow-up calls a week after sending the “calendar” release to determine placement status.

Media Advisory

- A media advisory is used to highlight the details of an upcoming event (e.g. press conference, health screening site) that you want the media to cover or to announce to its audience. Typically, media advisories are sent one day prior to an event and include pertinent information such as who, what, when, where and why.
Creating the media database for your media advisory:

- Get the name and contact information for the “weekend” assignment editors for television, radio and print media. The newsrooms at each media outlet will be your best source. Since there are so many people who work on the news desk, you can even fax the information to the attention of “news desk (with name of media outlet).”

- For radio, focus only on the major news stations since they are equipped to cover events. For example, a music radio station is not equipped with reporters to leave the station and report on an event.

- A helpful hint for print media is to also send information to the photography desk. Often times a photographer is more likely to be available to at least “photograph” an event.

- Send the media advisory no more than 3 days before your event. Spread the follow-up calls out the two days before your event. Morning is the best time for follow-up calls. The purpose of follow up is to determine if the news desk has the advisory on “file,” which means the release gets placed in a file for assignment to a reporter the day of the event. This is why it’s important to call the news desk again first thing the morning of your event.

Public Service Announcements (PSAs)

- A PSA is a written or taped message for radio or television. The purpose is to relay an important message or highlight an upcoming event. Public Service Announcements need to be sent in written or taped format to the community relations or public affairs director at the particular media outlet. It’s important to check with the contact person about the PSA length, which typically runs 30 seconds long.

Creating the media database for your PSA:

- Identify Public Affairs/Community Relations Directors at all radio stations.

- Send PSA for them to have read on the air.

- Follow-up a week after sending the PSA to determine their interest in using the PSA.
Pitch Letter

- A pitch letter is a great way to generate a reporter’s interest in a particular story you want covered. The first paragraph of a pitch letter should “hook” in the reader. The other paragraphs should include statistics, who is available for an interview, why the story would be appropriate for the demographic of the media outlet you are contacting, and your contact information.

Creating the media database for your pitch letter:

- Identify patients, pharmacists and other spokespeople in advance. (BE PROACTIVE -- don’t “pitch” a story without first identifying people. Also, the media prefer human-interest stories so the first thing they’ll usually ask for is a patient story.)

- Health reporters at television and print media and television and radio show producers.

- Identify appropriate shows for guests.

- Send the letter and follow up a few days after sending the letter.

- Be sure to prepare fact sheets on diabetes, medication use and any other pharmacy statistics in the event a reporter needs these items for a story.
TIPS FOR WORKING WITH THE LOCAL MEDIA

When a reporter calls

- **Be aware of deadlines.** Most reporters work under deadline pressure. If you don’t return their phone calls, you may be unable to get your side of the story told. If you can’t do the interview, explain your circumstance to the reporter. An insufficient answer or none at all makes it appear that you have something to hide. If you cannot do the interview, please contact your chapter advisor who will make other arrangements.

- **Ask Questions.** What is the story about? Why were you called for the interview? Try to find out what the reporter wants. Is the reporter knowledgeable about the subject? If not, it is a perfect time to educate.

- **Use the fact sheets and briefing papers.** It’s often easier for a reporter on deadline to rely on a clear, concise fact sheet than notes. Remember, you know more about a subject matter than the interviewer.

Preparing for the interview

- Know the reporter, publication/program, interview format and audience.
- Know your goal for the interview.
- Know what you want to say: Review your “key message points.”
- Jot down likely questions, appropriate answers.
- Prepare a range of questions: hard and easy.

Preparing for telephone interviews

- Buy preparation time by asking to call the reporter back if deadline allows.
- Establish an “interview atmosphere” and mindset.
- Use notes and message points.
- Ask questions in order to gain feedback.
- For radio, speak visually — use words to paint pictures.
- NEVER speak “off the record” – nothing is ever “off the record” in an interview
- NEVER speculate – give only the facts when asked a question – even if asked to speculate
Preparing for television interviews

- For men, a dark suit and blue shirt work best. For women, avoid solid black or white, or busy patterns. Bright colors are fine.
- Don’t wear large, shiny or noisy jewelry.
- Sit erect and slightly forward in the chair. Unbutton suit jacket when seated.
- Resist urge to shout into the microphone. Speak and gesture naturally.
- Talk to the reporter/interviewer, not the camera.
- Keep a pleasant expression; smile when appropriate.
- Hold your “interview attitude” from the moment you are lit until the interview is completely over and the camera is off.
- NEVER speculate – give only the facts when asked a question – even if asked to speculate.

Interviewing Tips

- Speak in “headlines.” Offer conclusion first, briefly and directly, and back it with facts or “proof points.”
- Don’t be fixated by a question. “Bridge” to a related point you want to make.
- Never say “No Comment.”
- Answer each question completely.
- Speak clearly. Avoid jargon and technical terms.
- Avoid hypothetical situations and “A or B” dilemmas.
- Asked about a problem? Talk about a solution.
- Don’t fall victim to silence; stop talking once you’ve answered a question.
- Don’t over-answer; keep answers simple and to the point.
- Don’t let false charges, facts or figures offered by a reporter stand uncorrected.
- Don’t know the answer? Never fake it. If appropriate, assure the reporter you will find and provide the needed facts in a timely manner, or offer to assist the reporter in finding that other source.
- Don’t overlap the reporter’s question; begin your answer when the reporter is finished.
- Don’t repeat a reporter’s negative statements or slurs. Frame your reply as a positive statement.
- There is no such thing as “off the record.”
- Always remain positive and sincere.
- Always answer questions honestly.
- Keep cool and enjoy yourself!
After the interview

- **Follow through on your promises.** If you told the reporter you’d call back with additional information, do it. Respect the reporter’s deadline.

- **Don’t ask to see the story or interview before it is published.** It is typically a matter of policy for most papers not to release a pre-published article.

- **How to complain if you don’t like the finished product.** First, call the reporter. If a significant mistake has been made, chances are the newspaper will want to correct it. If not, your next course is to contact the newspaper editor. Many papers have an ombudsman who handles complaints; you may want to contact that person as well.

When following up with the media

- Always ask if the reporter is on deadline.
- It’s best to call reporters in the morning since they are on deadline in the afternoons.
- Briefly explain what you are calling about. There is no need to give your name, school, etc. at the beginning of the conversation. It’s best to state why you are calling and determining if the reporter is interested in your event.
Sample Letter to the Editor

Date

Dear Editor:

Each year, thousands of people suffer from blindness, kidney failure, and lower limb amputations— all because of a condition known as diabetes. Over 25 million people in the U.S have diabetes, but nearly 7 million of those individuals are not aware that they are suffering from this condition. In fact, it is very likely that hundreds of those individuals are reading this newspaper even today. Undiagnosed diabetes is a national health crisis, and health care providers across the country are taking this opportunity to encourage adults of all ages to have their blood sugar checked.

There are certain risk factors that make it more likely for some people to develop diabetes than others. These include a family history of diabetes, individuals who are obese/overweight, and individuals who have little or no physical activity. Additionally, everyone’s risk increases with increasing age. This means that the individual reading this letter in your paper right now, regardless of current health status, may either have diabetes or be at risk of diabetes.

The student pharmacists at _____________ School of pharmacy are taking action to help the citizens of our community to learn if they may be at risk of diabetes, and to provide interested individuals with more information about this chronic condition through Operation Diabetes. Pharmacists and student pharmacists will be available from _____ a.m./p.m. to ______ a.m./p.m. at the _____________ pharmacy in insert city on insert date to help individuals determine if they are at risk, and to test the blood sugar of those who are believed to be at risk.

So on behalf of the children, grandchildren, brothers, sisters, mothers, and fathers of those reading this letter, do yourself and your family a favor— find out if you are at risk. It is a free service, it only takes a few minutes, and it could save your life.

Sincerely,

Name
Student Pharmacist Representative
American Pharmacists Association Academy of Student Pharmacists
School of Pharmacy Name

*statistics based on most current data 06/11
Sample Media Advisory

Your Coverage Is Invited

Contact: (Name)
(Date - 1 week before event)
(Phone number)

DIABETES SCREENING CAMPAIGN

(Your Organization) Sponsors Operation Diabetes

WHAT: (Describe the activity, whether it is a news conference or screening service at a local pharmacy) to:

1) Increase public awareness about diabetes, its symptoms and complications
2) Urge those at high risk to be screened
3) Encourage those with diabetes to take control of the disease.

WHO: Local pharmacists and student pharmacists will be available to assess individual risk for diabetes, screen high risk individuals, and provide health information to anyone interested.

WHEN: (day, date, time)

WHERE: (Location)

WHY:

- 25.8 million Americans have diabetes, 7 million of them are undiagnosed
- Diabetes is the leading cause of blindness and vision loss in adults
- Diabetes is the most common cause of kidney failure, resulting in countless numbers of renal transplants.
- Diabetes contributes to over 200,000 deaths in the U.S.
- Diabetes is the 7th leading cause of death in the U.S.
- Total annual health care and related costs of diabetes are about $174 billion.
- Of this total, direct medical costs (e.g. hospitalizations, medical care, treatment supplies) account for about $116 billion. The other $58 billion covers indirect costs such as disability payments, time lost from work, and premature death.
- The morbidity and mortality from diabetes can be reduced, delayed, and in some cases prevented with appropriate action.

*statistics based on most current data 06/11
Sample Public Service Announcements (PSAs)

Public service announcements (PSAs) are one means of directly reaching the public with information on diabetes. Below are some samples of PSAs, but use your imagination and write your own targeted directly to your audience. Remember, people love the radio. They listen in their cars, during exercise, and at home. It's a great tool to target different audiences, too, by submitting these to various stations. Also send them to your local TV stations. They may use them during a public service program.

(Date)

Dear Public Service Director:

Diabetes is a serious disease that is hitting our communities in epidemic numbers. A significant number of Americans with diabetes are not taking the necessary steps to manage this controllable disease. Take a look at the current statistics:

- Approximately 25 million Americans have diabetes, 7 million of whom do not know they have the disease.
- A significant number of people with Type 2 diabetes have unacceptably high sugar levels, putting them at risk for serious diabetes-related complications.
- Diabetes is the leading cause of adult blindness, kidney failure, and amputations, and the 7th leading cause of death by disease.
- People with diabetes are at an increased risk of heart disease and stroke.
- Minority populations are disproportionately affected by diabetes, especially African Americans, Hispanic/Latino Americans, American Indians, and Asian Americans and Pacific Islanders.

Early detection and proper management of diabetes can prevent many of these. In an effort to increase public awareness about the dangers associated with the disease, the (School of Pharmacy) in cooperation with the American Pharmacists Association Academy of Student Pharmacists (APhA-ASP) is participating in Operation Diabetes.

Please use these scripts. Feel free to adapt them for your audience. You will be reminding your listeners about the seriousness of this disease and the importance of managing it. And you will be encouraging them to control their diabetes...For Life!

Thank you for your help in reducing the number of deaths and illnesses associated with diabetes in our communities. If you have any questions, please feel free to call {Name} at {phone number}.
Your support is greatly appreciated.

*statistics based on most current data 06/11*
Sample Public Service Announcements

FOR IMMEDIATE RELEASE
CONTACT: (Your contact person)
   (Date of Release)
   (Phone number)

RUN DATE: (from date to date)

15-Second Spot

1. Diabetes is the leading cause of adult blindness, kidney failure, and amputations, and the 7th leading cause of death by disease. Are you at risk? Call your physician or pharmacist today!

2. 25 million people in the US have diabetes, and 7 million more don’t know it. Could you be at risk? Call your physician or pharmacist today, and find out the facts.

20-Second Spot

1. If you have diabetes, keep your blood sugar under control. Take charge of what you eat. Get regular exercise. Test your blood sugar, and take prescribed medicines. Your pharmacist can help you control your diabetes for life.

2. Individuals with diabetes have medical costs that are 2.3 times higher than those without diabetes. These cost can be even greater without properly using your medication. Talk with your pharmacist today, and you can save more than just your bills.

30-Second Spot

1. Diabetes is the 7th leading cause of death by disease. Complications from diabetes can result in blindness, kidney failure, amputations, heart attack and stroke. Unfortunately 7 million Americans are unaware they have the disease. Are you at risk? Contact your physician or pharmacist about managing your diabetes.

2. If you have diabetes, here’s an important message from _________ College of Pharmacy in conjunction with the American Pharmacists Association Academy of Student Pharmacists. Diabetes is a serious problem...but research shows that if you keep your blood sugar close to normal, you can reduce your chances of serious health problems such as blindness, kidney failure, and amputations. Take charge of what you eat. Get regular physical activity. Test your blood sugar. And take your medicine as prescribed. Control your diabetes. For life. Contact your doctor or pharmacist about managing your diabetes.

*statistics based on most current data 06/11
THE FACTS ABOUT AMERICA’S SEVENTH LEADING CAUSE OF DEATH BY DISEASE

What is diabetes?

Diabetes is a chronic metabolic disease in which the body does not produce or properly use insulin, a hormone that is needed to convert sugar, starches, and other food into energy.

How many Americans have diabetes?

- About 25.8 million Americans have diabetes. About 7 million of these people do not know they have the disease.
- Each year, 1.9 million people are diagnosed with diabetes.¹

What is the prevalence of diabetes by type?

- Type 1 diabetes accounts for 5 to 10 percent of all diagnosed cases of diabetes.
- Type 2 diabetes accounts for 90 to 95 percent of all diagnosed cases of diabetes.

What is the prevalence of diabetes by gender?

- 13 million men have diabetes (11.8 percent of all men age 20 years and older).
- 12.6 million women have diabetes (10.8 percent of all women age 20 years and older).

What is the prevalence of diabetes by age?

- Age ≥20 years = 25.6 million or 11.3% of all people in this age group
- Age ≥65 years = 10.9 million or 26.9% of all people in this age group

What is the prevalence of diabetes by race/ethnicity?

2007-2009 national survey data for people diagnosed with diabetes, aged 20 years or older include the following prevalence by race/ethnicity:

- 7.1% of non-Hispanic whites
- 8.4% of Asian Americans
- 12.6% of non-Hispanic blacks
- 11.8% of Hispanics

Among Hispanics rates were:

- 7.6% for Cubans
- 13.3% for Mexican Americans
- 13.8% for Puerto Ricans.

How many deaths are linked to diabetes?

- Diabetes contributed to 231,404 deaths in 2007.
- Diabetes is the 7th leading cause of death
How much does diabetes cost the nation?

- Total health care and related costs for the treatment of diabetes run about $174 billion annually.
- Of this total, direct medical costs (e.g. hospitalizations, medical care, treatment supplies) account for about $116 billion.
- The other $58 billion covers indirect costs such as disability payments, time lost from work, and premature death.

Statistics current as of 06/11

References

FOR IMMEDIATE RELEASE:  CONTACT:  (Contact Name)
January 19, 2000  Area Code/Phone Number

Stockton Pharmacists and Student Pharmacists to Host Health Clinics for Nationwide Diabetes Screening Day

WHO:  California Pharmacists Association/APhA Academy of Students of Pharmacy at University of the Pacific

WHAT:  Free Diabetes Screening Day in Stockton
(Open to the public)

WHEN:  Saturday, January 22, 2000
10:00 a.m. – 3:00 p.m.

WHERE:  Rite Aid
24 Harding Street, Stockton (list nearest cross street[s])
(209) 555-1212

The first-ever Nationwide Diabetes Screening Day is being held at XXX sites throughout (name of city or state) in conjunction with the (name of pharmacy school) to teach people about appropriate medication use and give people an opportunity to get a free diabetes screening.

Licensed pharmacists will be on hand to answer questions about medications, the possibility of drug interactions and how to take medicines safely and with the best results.

The Nationwide Diabetes Screening Day is sponsored by (list sponsors). In addition to the California Pharmacists Association, other participants include the American Diabetes Association, LifeScan, UCSF Pharmacy Alumni Association, and Rite Aid.

MEDIA OPPORTUNITIES: (list visual opportunities that may interest the media)
- Participate in free diabetes screenings
- Observe pharmacists and student pharmacists provide screenings to the public

(Insert contact person) will be the site contact on the day of the screening and can be reached at (insert phone/cell phone number).
<<UNIVERSITY X>>
Operation Diabetes
APhA Academy of Student Pharmacists
(APhA-ASP)
SAMPLE – Screening Site Location(s)

PLEASE PRINT:
Screening Location # : __________________________________________
Site Contact Name: ______________________________________________
Address: ________________________________________________________
City: ______________________ State: ________ Zip Code: ______
E-mail: ____________________ Telephone: _________________________
Website: ______________________

Screening Location # : __________________________________________
Site Contact Name: _____________________________________________
Address: ________________________________________________________
City: ______________________ State: ________ Zip Code: ______
E-mail: ____________________ Telephone: _________________________
Website: ______________________

Screening Location # : __________________________________________
Site Contact Name: _____________________________________________
Address: ________________________________________________________
City: ______________________ State: ________ Zip Code: ______
E-mail: ____________________ Telephone: _________________________
Website: ______________________

Please keep this form for your records.
<<UNIVERSITY X>>
Operation Diabetes
APhA Academy of Student Pharmacists
(APhA-ASP)
SAMPLE – Participant Consent Form

PLEASE PRINT:
Name:________________________________________________________

Have you already been diagnosed with diabetes?  ___Yes ___ No

If applicable, are you pregnant?  ___Yes  ___No  (if YES, DO NOT CONTINUE)

Have you consumed food or liquid other than water in the past 8 hours?
___Yes ___No

Would you like us to measure your blood glucose (i.e. blood sugar) level?
___Yes ___No

Would you like us to contact your physician with the results of the assessment?
___Yes ___No

If Yes, please provide physician information:

Physician’s Name:________________________________________________________

Address:_____________________________ City/Zip:__________________________

Daytime Phone: (____)______________

I hereby authorize the pharmacists and student pharmacists conducting today’s screening event to assess my risk of diabetes. Also, if I have indicated that I would like my blood glucose level measured, I understand that a blood sample must be obtained by pricking my finger. I authorize the pharmacists or student pharmacists conducting today’s screening to obtain the blood sample and to conduct appropriate tests to measure my blood glucose level. I am participating in this event on a voluntary basis, and understand that the risks associated with this testing are that of a sore finger at the site of blood sampling. I authorize the organizing body and/or pharmacists, and/or student pharmacists, the release of my results to my physician as I have indicated above. I indemnify the organizing body and all persons connected with them from any and all claims that may result from my voluntary participation in this event.

Signature:__________________________________________ Date:__________________
American Diabetes Association

Type 2 Diabetes Risk Assessment Form

Take this test to see if you are at risk for having type 2 diabetes. Type 2 Diabetes is more common in African Americans, Hispanics/Latinos, American Indians, Asian Americans, and Pacific Islanders.

Write your score in the box

1) How old are you?
   Less than 40 years (0 points)
   40 – 49 years (1 point)
   50 – 59 years (2 points)
   60 years or older (3 points)

2) Are you a man or a woman?
   Man (1 point)
   Woman (0 points)

3) If you are a woman, have you ever been diagnosed with Gestational diabetes?
   Yes (1 point)
   No (0 points)

4) Do you have a mother, father, sister, or brother with diabetes?
   Yes (1 point)
   No (0 points)

5) Have you ever been diagnosed with high blood pressure?
   Yes (1 point)
   No (0 points)

6) Are you physically active?
   Yes (0 points)
   No (1 point)

7) What is your weight status?
   (see chart on next page)
<table>
<thead>
<tr>
<th>Height (ft &amp; in)</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’10”</td>
<td>119-142</td>
</tr>
<tr>
<td>4’11”</td>
<td>124-147</td>
</tr>
<tr>
<td>5’0”</td>
<td>128-152</td>
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<tr>
<td>5’1”</td>
<td>132-157</td>
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<td>5’2”</td>
<td>136-163</td>
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<tr>
<td>5’3”</td>
<td>141-168</td>
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<tr>
<td>5’4”</td>
<td>145-173</td>
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<tr>
<td>5’5”</td>
<td>150-179</td>
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<td>5’6”</td>
<td>155-185</td>
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<tr>
<td>5’7”</td>
<td>159-190</td>
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<td>5’8”</td>
<td>164-196</td>
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<td>5’9”</td>
<td>169-202</td>
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<tr>
<td>5’10”</td>
<td>174-208</td>
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<tr>
<td>5’11”</td>
<td>179-214</td>
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<tr>
<td>6’0”</td>
<td>184-220</td>
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<td>6’1”</td>
<td>189-226</td>
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<td>6’2”</td>
<td>194-232</td>
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<td>200-239</td>
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<td>6’4”</td>
<td>205-245</td>
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<td>(1 Point)</td>
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</table>

You weigh less than the amount in the left column (0 points)


If you scored 5 or higher:

You are at increased risk for having type 2 diabetes. However, only your doctor can tell for sure if you do have type 2 diabetes or prediabetes which is a condition that precedes type 2 diabetes in which blood glucose levels are higher than normal. Talk to your doctor to see if additional testing is needed.

Prevention of type 2 diabetes:

Lifestyle modifications have been shown to be very effective in reducing risk of developing type 2 diabetes. Some lifestyle interventions may include: weight loss of 7% body weight, moderate physical activity at least 150 minutes per week (about 30 minutes a day, 5 days a week), and certain medications that your doctor can discuss with you.
Operation Diabetes
APhA Academy of Student Pharmacists (APhA-ASP)
SAMPLE – Patient Assessment Form

Today’s Date: ________________

Patient’s Name: ____________________________________________________________

Age ______ M/F _____ Tobacco Use ______ Flu shot (date) ______

Pneumococcal vaccine (date) ______ Tdap vaccine (approx. date of last) ______

Hepatitis vaccine (date) ______ Did you receive all three doses? ______

Diabetes Risk Score (from ADA Risk Assessment Form): ____________

Blood Glucose Level: ______

Type of Test: ___ Fasting (≥ 8 hours since last food intake)
     ___ Non-Fasting (< 8 hours since last food intake)

Action Plan and Notes for Patient:
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

Referral information (if applicable):

Appointment scheduled with: ______________________________

Telephone: ____________________________

Date/Time: ____________________________

Pharmacist referring Patient: ______________________________

Pharmacist’s contact information: ______________________________

Note: Please take a copy of this form with you to your next physician’s office visit and discuss with your primary care physician.
Event Date: _____________  Location: ________________

<table>
<thead>
<tr>
<th>Age/Sex/Race</th>
<th>ADA Risk Score</th>
<th>Fasting? (Y/N)</th>
<th>Blood Glucose/ A1C Level</th>
<th>Referral? (Y/N)</th>
<th>Other¹</th>
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¹ Possible notations under other might include whether or not vaccines were administered or any diabetes signs and symptoms that were noted.
The list below has important Action Steps to help you get the most from your medications. Follow the checklist to help you work with your pharmacist and doctor to manage your medications AND make notes of your actions next to each item on your list.

<table>
<thead>
<tr>
<th>Action Steps</th>
<th>What I need to do...</th>
<th>Notes</th>
<th>What I did and when I did it...</th>
</tr>
</thead>
<tbody>
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</table>

My Next Appointment with My Pharmacist is on: ____________________(date) at __________ AM □ □ PM
MY MEDICATION RECORD

Name: _______________________________  Birth date: _______________________________

Include all of your medications on this record: prescription medications, nonprescription medications, herbal products, and other dietary supplements. Always carry your medication record with you and show it to all your doctors, pharmacists and other healthcare providers.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Take for...</th>
<th>When do I take it?</th>
<th>Start Date</th>
<th>Stop Date</th>
<th>Doctor</th>
<th>Special Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Morning</td>
<td>Noon</td>
<td>Evening</td>
<td>Bedtime</td>
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</table>

This sample Personal Medical Record (PMR) is provided only for general informational purposes and does not constitute professional health care advice or treatment. The patient (or other user) should not, under any circumstances, solely rely on, or act on the basis of, the PMR or the information therein. If he or she does so, then he or she does so at his or her own risk. While intended to serve as a communication aid between patient (or other user) and health care provider, the PMR is not a substitute for obtaining professional healthcare advice or treatment. This PMR may not be appropriate for all patients (or other users). The National Association of Chain Drug Stores Foundation and the American Pharmacists Association assume no responsibility for the accuracy, currentness, or completeness of any information provided or recorded herein.
**MY MEDICATION RECORD**

Name: ___________________________  Birth date: ___________________  Phone: ______________________

Always carry your medication record with you and show it to all your doctors, pharmacists and other healthcare providers.

### Emergency Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Relationship</th>
<th>Phone Number</th>
</tr>
</thead>
</table>

### Primary Care Physician

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
</table>

### Pharmacy/Pharmacist

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
</table>

### Allergies

<table>
<thead>
<tr>
<th>What allergies do I have? <em>(Medicines, food, other)</em></th>
<th>What happened when I had the allergy or reaction?</th>
</tr>
</thead>
</table>

### Other Medicine Problems

<table>
<thead>
<tr>
<th>Name of medicine that caused problem</th>
<th>What was the problem I had with the medicine?</th>
</tr>
</thead>
</table>

### When you are prescribed a new drug, ask your doctor or pharmacist:

- What am I taking?
- What is it for?
- When do I take it?
- Are there any side effects?
- Are there any special instructions?
- What if I miss a dose?

### Notes:

<table>
<thead>
<tr>
<th>Notes:</th>
<th></th>
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</table>

<table>
<thead>
<tr>
<th>Date last updated</th>
<th>Date last reviewed by healthcare provider</th>
</tr>
</thead>
</table>

Patient’s Signature  Healthcare Provider’s Signature
Blood Glucose Monitoring and Therapy Overview

Two tests are available for health providers and patients to assess the effectiveness of medication and the disease: hemoglobin A1C testing (A1C) and patient self-monitoring of blood glucose (SMBG).

A1C Testing
A1C test measure the amount of sugar on red blood cells, and thus show the relative control of blood sugar over the past 90-120 days (lifespan of a red blood cell is approximately 120 days). Patients should be familiar with their A1C number. Generally speaking, patients with stable glycemia within target range should have their A1C checked twice per year, while unstable or highly intensively managed patients may be tested up to four times a year. A1C test do not measure for glycemic variability or hypoglycemic events; therefore, the best management is a combination of A1C test and a patient’s SMBG levels.

SMBG
The frequency and timing of SMBG should be given to the patient. For most patients with type 1 diabetes and pregnant women taking insulin, SMBG is recommended three or more times daily. The optimal frequency and timing of SMBG for patients with type 2 diabetes on noninsulin therapy is unclear. If patients are using their glucometer at home to record SMBG levels, it is only reasonable that pharmacists ensure monitoring technique and timing with regard to meals is accurate. Patients should be educated on how to use their machine, and when to test. Testing times could vary, but most SMBG levels should be checked immediately upon waking (fasting blood glucose), before any meal of the day (preprandial), or at least 2 hours following a meal (postprandial).

Tight management and control of blood glucose has been shown to improve outcomes in two very significant clinical trials: the Diabetes Control and Complications Trial (DCCT), which studied patients with Type 1 diabetes, and the United Kingdom Prospective Diabetes Study (UKPDS), which studied patients with Type 2 diabetes. These studies proved that at-home self-management of diabetes places the patient in a greater place of responsibility for his or her condition – resulting in greater opportunity for compliance with medication and lifestyle regimens because of visual reinforcement from sometimes multiple daily glucose measurements. There is a correlation between A1C results and average blood glucose values published in ADA’s Standards of Medical care noted in Table 1.

<table>
<thead>
<tr>
<th>Table 1 – Correlation of A1C with average glucose</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1C (%)</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

*adapted from ADA 2011 Guidelines; * Formula: eAG = 28.7 x A1C − 46.7
As indicated by the American Diabetes Association (ADA), the A1C goal for diabetic patients is <7%. Lowering the A1C to below or around 7% has been shown to reduce microvascular and neuropathic complications of diabetes. Some providers suggest a more stringent A1C goal of <6.5% for selected patients or < 8% for elderly patients. While pharmacists can have a strong, positive impact on patient’s health by promoting lifestyle modifications and regular blood glucose monitoring, the pharmacist also plays a key role in ensuring patient’s optimal drug therapy management. There are a number of therapeutic options available at the hands of health care professionals to enhance lifestyle modifications in maximizing glucose control. Some of the more common medications used in glycemic management of Type 2 diabetes are noted in Table 2 below.

<table>
<thead>
<tr>
<th>Class</th>
<th>Medications</th>
<th>Action(s)</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biguanides</td>
<td>Metformin</td>
<td>↓ hepatic glucose production</td>
<td>No weight gain</td>
<td>GI side effects (diarrhea, abdominal cramping)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>↓ intestinal glucose absorption</td>
<td>No hypoglycemia</td>
<td>Vitamin B12 deficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>↑ insulin action</td>
<td>↓ CV events and mortality</td>
<td>CI: ↓ kidney function</td>
</tr>
<tr>
<td>Sulfonlureas</td>
<td>Glyburide</td>
<td>↑ insulin secretion</td>
<td>Well tolerated</td>
<td>Hypoglycemia is common</td>
</tr>
<tr>
<td></td>
<td>Glipizide</td>
<td></td>
<td>↓ in CV events and mortality</td>
<td>Weight gain</td>
</tr>
<tr>
<td></td>
<td>Glimepiride</td>
<td></td>
<td></td>
<td>Low “durability”</td>
</tr>
<tr>
<td>Meglitinides</td>
<td>Repaglinide</td>
<td>↑ insulin secretion</td>
<td>Accentuated effects around meal ingestion</td>
<td>Hypoglycemia</td>
</tr>
<tr>
<td></td>
<td>(Prandin®)</td>
<td></td>
<td></td>
<td>Weight gain</td>
</tr>
<tr>
<td></td>
<td>Nateglinide</td>
<td></td>
<td></td>
<td>Dosing frequency</td>
</tr>
<tr>
<td></td>
<td>(Starlix®)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiazolidinediones</td>
<td>Pioglitazone</td>
<td>↑ peripheral insulin sensitivity</td>
<td>No hypoglycemia</td>
<td>Weight gain</td>
</tr>
<tr>
<td></td>
<td>(Actos®)</td>
<td></td>
<td>Actos only:</td>
<td>Edema</td>
</tr>
<tr>
<td></td>
<td>Rosiglitazone</td>
<td></td>
<td>↑ HDL cholesterol</td>
<td>Heart failure</td>
</tr>
<tr>
<td></td>
<td>(Avandia®)</td>
<td></td>
<td>↓ triglycerides</td>
<td>Bone fractures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>↑ LDL cholesterol</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CI: patients with heart disease (FDA warning)</td>
<td></td>
</tr>
<tr>
<td>A-Glucosidase inhibitors</td>
<td>Acarbose</td>
<td>Intestinal carbohydrate digestion slowed</td>
<td>Nonsystemic medication</td>
<td>GI side effects (gas, flatulence, diarrhea)</td>
</tr>
<tr>
<td></td>
<td>(Precose®)</td>
<td></td>
<td>↓ postprandial glucose</td>
<td>Dosing frequency</td>
</tr>
<tr>
<td></td>
<td>Miglitol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Glyset®)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLP-1 receptor agonist</td>
<td>Exenatide</td>
<td>↑ insulin secretion</td>
<td>↓ body weight</td>
<td>GI side effects (nausea, vomiting, diarrhea)</td>
</tr>
<tr>
<td></td>
<td>(Byetta®)</td>
<td>↓ glucagon</td>
<td>Potential for</td>
<td></td>
</tr>
<tr>
<td>Liraglutide (Victoza&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>secretion</td>
<td>improved β-cell mass/function</td>
<td>diarrhea) Cases of acute pancreatitis observed Injection Long-term safety unknown</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>↑satiety</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPP-4 inhibitors (incretin enhancers)</td>
<td>Sitagliptin (Januvia&lt;sup&gt;®&lt;/sup&gt;) Saxagliptin (Onglyza&lt;sup&gt;™&lt;/sup&gt;) Linagliptin (Tradjenta&lt;sup&gt;™&lt;/sup&gt;)</td>
<td>↑active GLP-1 concentration ↑active GIP concentration ↑insulin secretion ↓glucagon secretion</td>
<td>No hypoglycemia Weight neutral Occasional reports of urticaria/angioedema Cases of pancreatitis Long-term safety unknown</td>
<td></td>
</tr>
<tr>
<td>Bile acid sequestrants</td>
<td>Colesevelam (Welchol&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>Binds bile acids/cholesterol</td>
<td>No hypoglycemia ↓LDL cholesterol Constipation ↑triglycerides May interfere with absorption of other medications</td>
<td></td>
</tr>
<tr>
<td>Dopamine-2 agonists</td>
<td>Bromocriptine (Cycloset&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>Alters hypothalamic regulation of metabolism ↑insulin sensitivity</td>
<td>No hypoglycemia Dizziness/syncope Nausea Fatigue Rhinitis</td>
<td></td>
</tr>
</tbody>
</table>

Modified table from Diabetes Care, Volume 35, Supplement 1, January 2012 (S22-23)

**CV** = cardiovascular  
**GI** = gastrointestinal  
**CI** = contraindicated

The pharmacist’s role in diabetes self-management programs is perhaps more broad than one might imagine on first glance. Medication therapy management and education is core to the pharmacist’s role, and self-management education on a wide variety of topics may be necessary – especially in those communities where the pharmacist may be the only available health care provider. In an ideal situation, the pharmacist is part of a multidisciplinary health care team approach to diabetes care. This is evidenced by the multiplicity of body systems that are affected by the condition.

**Glucose Testing: Regulatory Considerations**

In addition to the clinical and practice knowledge associated with diabetes, health care providers must become familiar with certain legal and liability obligations to become involved with glucose screening. The Clinical Laboratory Improvement Amendment (CLIA) of 1988 was implemented to improve practice and protect patients by ensuring quality laboratory testing. CLIA regulations and standards are categorized by the level of complexity of the test: waived, moderate, and high.
Pharmacies offering glucose screenings are classified as waived laboratories. While there are no specific requirements for personnel operation of waived entities, it is important to follow the suggestions for good laboratory practice:

- Keep the manufacturer’s product insert for the laboratory test in use and be sure it is available to the testing personnel. Use the manufacturer’s product insert for the kit currently in use; do not use old product inserts.
- Follow the manufacturer’s instructions for specimen collection and handling.
  - Are specimens stored at the proper temperature?
  - Are the appropriate collection containers used?
- Be sure to properly identify the patient.
  - Does the name on the test requisition (or prescription) match the patient’s name?
  - Does the name on the patient’s chart match the name on the patient’s identification?
  - If more than one patient is present with the same first and last name, how do you determine which one is the test patient? (Look for possible gender differences, social security number, patient identification number, birth dates, different middle name, and relevance of the test to the patient’s history).
- Be sure to label the patient’s specimen for testing with an identifier unique to each patient.
- Inform the patient of any test preparation such as fasting, clean catch urines, etc.
- Read the product insert prior to performing a test.
  - Become familiar with the test procedure.
  - Study each step and perform them in the proper order.
  - Know the time required for performing the test and achieving the optimal result.
  - Be sure to have all of the required reagents and equipment ready before actually performing the test.
  - Be able to recognize when the test is finished – e.g. will there be a blue plus or minus sign against a white background?
  - Follow the manufacturer’s instructions and when a new kit is opened, perform the quality control to be sure that the kit works prior to testing patient samples.
- Follow the storage requirements for the test kit. If the kit can be stored at room temperature, and this changes the expiration date, write the new expiration date on the kit.
- Do not mix components of different kits.
- Record the patients’ test results in the proper place, such as the patient’s chart or the laboratory test log, but not on unidentified Post-It notes or pieces of scrap paper which can be misplaced.
  - Record the results according to the instructions in the manufacturer’s product insert.
  - If it’s a qualitative test, spell out positive / negative or pos/neg because symbolic representations can be altered (the – can be altered to a +).
  - Include the name of the test, the date the test was performed, and the initials of the testing personnel in the test record. Include the calendar year in the date.
  - If the same test is performed on a patient multiple times in one day, include the time of each test.
- Perform any instrument maintenance as directed by the manufacturer.
NOTE: THIS DOCUMENT IS INTENDED AS A PRELIMINARY EDUCATION TOOL FOR LABORATORIES THAT HAVE A CLIA CERTIFICATE OF WAIVER. THE STATEMENTS ARE RECOMMENDATIONS THAT MAY HELP TO IMPROVE THE QUALITY OF LABORATORY TESTING. ADHERENCE TO THIS DOCUMENT IS VOLUNTARY AND IS NOT CONSIDERED TO BE ALL INCLUSIVE. IN ADDITION TO NATIONAL REQUIREMENTS, MANY STATES HAVE ADDITIONAL REGULATIONS THAT APPLY TO LABORATORY TESTING, AND SOME REQUIRE A SEPARATE APPLICATION.

INFORMATION ON THE CLIA PROGRAM IS AVAILABLE ON THE INTERNET. THE WEB ADDRESS IS:
www.cms.hhs.gov/clia
Glucometers, test strips, and lancet devices

The following is a list of monitors and finger stick devices. This is not an all-inclusive list. Students and pharmacists MUST consult the monitor packaging or the manufacturers’ websites for complete information before using any particular device. APhA and the program supporter shall not be held liable for the accuracy of the information presented. Inclusion of a particular monitor or group of monitors does not constitute endorsement of the device by APhA or the program’s supporter.

Johnson & Johnson Company - www.lifescan.com
One Touch® Basic® One Touch® UltraMini®
One Touch® UltraSmart® One Touch® Profile® One Touch® Ultra®2
One Touch® SureStep® One Touch® Select™ One Touch® UltraLink®
One Touch® FastTake® One Touch® Ultra® One Touch® Verio™IQ
One Touch Ultra Blue Test Strips – Use with UltraSmart, Basic, Profile, Ultra, UltraMini, Ultra2, and UltraLink
One Touch SureStep Test Strips – Use with One Touch SureStep
One Touch FastTake Test Strips – Use with One Touch FastTake
One Touch Select Test Strips – Use with One Touch Select
One Touch Verio – Use with One Touch Verio™IQ

Roche - www.accu-chek.com
ACCU-CHEK® Advantage® System – Uses ACCU-CHEK Comfort Curve test strips
ACCU-CHEK® Compact™ Plus – Uses ACCU-CHEK Compact Plus test strips
ACCU-CHEK® Aviva™- Uses ACCU-CHEK Aviva test strips
ACCU-CHEK® Active™ System – Uses ACCU-CHEK Active test strips
ACCU-CHEK® Nano – Uses ACCU-CHEK SmartView test strips
Lancet devices: ACCU-CHEK Multiclix, ACCU-CHEK Softclix, and ACCU-CHEK FastClix

Abbott - www.abbottdiabetescare.com/products
FreeStyle Freedom® Lite®
FreeStyle Lite®
  Freestyle Lite® test strips used for both meters above.
FreeStyle® meter
FreeStyle Flash®
FreeStyle Freedom®
  FreeStyle® Test strips used for three meters above
Precision Xtra® Blood Glucose and Ketone Monitoring System- requires Precision ketone and glucose test strips

Bayer Healthcare - www.bayercarediabetes.com
Ascensia® BREEZE® 2 – uses Breeze 2 10-test disc test strips
Contour® USB
Ascensia® Contour®
ContourLINK
  Three above use Ascensia® Contour® test strips
Contour® NEXTEZ – coming soon
A1CNow® Selfcheck
Lancing device: Microlet®2
For more information on diabetes and patient information materials:

**American Pharmacists Association**
2215 Constitution Ave., NW
Washington, DC 20037
800-237-2742 (APhA) x 7586
APhA-ASP@aphanet.org

**American Diabetes Association**
1701 North Beauregard Street
Alexandria, VA 22311
1-800-DIABETES
www.diabetes.org

**American Association of Diabetes Educators**
200 W. Madison Street
Suite 800
Chicago, IL 60606
www.aadenet.org

**National Diabetes Education Program**
www.ndep.nih.gov

For more information on regulations regarding blood glucose screenings:

**OSHA regulations:**
Occupational Safety and Health Administration
U.S. Department of Labor
200 Constitution Ave. NW
Washington, DC 20210
1-800-321-OSHA
www.osha.gov

**CLIA regulations:**
U.S. Department of Health and Human Services
www.hhs.gov
http://www.fda.gov/cdrh/CLIA/
OR
Contact your state public health department
Diabetic Food and Exercise Guidelines

The following information on diet and exercise is for individuals at high-risk or diagnosed with Type 2 Diabetes.

Adapted from:

General Nutrition
- Nutrition and exercise are major interventions in the treatment of diabetes mellitus.
- In type 2 diabetes, nutrition and exercise are extremely important and the most cost-effective therapeutic interventions.
- A moderate weight loss of 7% body weight can result in decreased insulin resistance, improved glucose and lipid values, and reduced blood pressure in patients with type 2 diabetes.
- The key is the caloric intake relative to the caloric output.
- Fiber is encouraged from a variety of high-fiber containing foods such as whole grains, fruits, and vegetables because they provide minerals, other substances important for good health, and fiber. The USDA recommends 14 g fiber per 1000 calories consumed for individuals at high risk for Type 2 diabetes.

Carbohydrate Intake
- Carbohydrate recommended for patients with diabetes is 55 to 60% of the total caloric intake.
- Recent studies found that patients on low-carbohydrate diets (< 130 grams/day) lost more weigh at 6 months and had greater improvements in triglyceride and HDL cholesterol concentrations than low-fat diets than patients on low-fat diets.
- Starches mixed with or containing fiber may slow glucose absorption.
- Total amount of carbohydrate per meal, rather than its source; seems to be the critical factor that determines its effect on blood glucose.

Fat Intake
- Saturated fat intake should be < 7% of total calories.
- Intake of trans fat should be minimized.
- Individuals with diabetes, dietary cholesterol intake should be limited to <200 mg/day.
- Normal intake of fat should be limited to a maximum of 30% of the total caloric intake.
- Each gram of fat contains 9 calories, in contrast with 4 calories for each gram of carbohydrate or protein.
- Patients with dyslipidemia, fat intake should be reduced to as low as 15% and saturated fats should be avoided.
- Increase consumption of omega-3 fatty acids

Protein Intake
- Intake of protein should be 15 to 20% of the total daily caloric intake.
- No evidence has indicated that a lower than average intake of dietary protein will protect against the onset of renal disease. However, after the onset of microalbuminuria, effort to decrease intake of protein to 10-15%.
Alcohol Intake

- The effect on blood glucose depends not only on the amount of alcohol ingested but also on the amount of alcohol ingested in relationship to food and the content of the food consumed.
- Alcohol is currently counted as a fat exchange.
- Daily alcohol should be limited to one drink per day or less for adult women and two drinks per day or less for adult men.
- Patients with pancreatitis, dyslipidemia, or neuropathy should especially avoid the use of alcohol.

Exercise

- If physically able, individuals with diabetes should be encouraged to do 150 minutes of moderate-intensity aerobic activity per week and perform resistance training three times per week.
- The goal should be to promote physical fitness with consistent use of an exercise program. The level of fitness may be more important than weight loss to decrease mortality.
- The timing of the onset of an exercise program might be important because postprandial physical activity seems to lower postprandial blood glucose levels.
- Every exercise prescription should be tailored to the individual patient’s capacity and coexistent conditions, such as hypertension, or prior myocardial infarction or neuropathy.
REPORTING GUIDELINES

The APhA Academy of Student Pharmacists (APhA-ASP) will recognize each chapter that implements an Operation Diabetes program in their community. Events may be conducted at any time throughout the reporting cycle (June 1, 2012 – May 31, 2013). Chapters must use the following reporting guidelines to participate in this award program. These guidelines outline how your chapter should write its report on the project(s) that were implemented as part of the Operation Diabetes campaign. It is also encouraged to include photographs, examples of unique supporting materials, and videos from your projects and events. Remember to answer all questions with honesty and integrity. The Operation Diabetes Awards Selection Committee will review the report, and may ask for supporting documentation or further clarification to aid in its decision.

Please complete and submit the following sections of the Operation Diabetes report that outline your Chapter’s activities during the reporting cycle:

- **Section I:** Chapter Contact Information
- **Section II:** Essay
- **Section III:** Chronological List
- **Section IV:** Executive Summary (See PDF)
- **Section V:** Report Submission Confirmation and Advisor Signature (CAA Report Appendix F)

*Please note that the reports for all APhA-ASP National Patient Care Projects are separate of the “patient care” section of the Chapter Achievement Awards (CAA) Report, and the award selection processes are independent. For information on the CAA, visit pharmacist.com/students.*

CRITERIA FOR AWARD SELECTION

**Collaboration (20 points):**
What is the extent and type of collaboration with other organizations? (e.g. state and local pharmacy organizations, health departments, health-systems, community pharmacies, grocery stores, senior citizens groups, nursing agencies, physicians, student health organizations, etc.)

**Participation (20 points):**
How many student pharmacists, college of pharmacy faculty and staff, and additional pharmacists were involved in planning or implementation?

**Originality (25 points):**
How creative, innovative, and original were projects and programs related to Operation Diabetes?

**Outcome (35 points):**
What effect did the project have in your community? How many patients were screened and educated through this project?
NATURE OF THE AWARDS

The Operation Diabetes Awards Selection Committee may include 5 to 7 individuals representing the following:

- APhA-ASP Awards Standing Committee
- APhA-ASP Education Standing Committee
- APhA-ASP National Executive Committee
- Rite Aid Representative
- Diabetes Clinical Pharmacy Specialist

The following recognition will be given:

- Eight regional APhA-ASP Chapter winners will receive a laminated certificate and $250.
- One national winner will receive a crystal trophy and $500.
- All winning chapters will be recognized in Student Pharmacist magazine and during the APhA Annual Meeting & Exposition at the APhA-ASP Opening General Session.

All decisions made by the Operation Diabetes Awards Selection Committee are final.

ENTRY REQUIREMENTS

Report Submission

- Reports must be submitted by **11:59pm PST on July 15**.
- Reports, photographs, forms, supporting materials, and videos will only be accepted electronically via each Chapter’s Dropbox folder. (See instructions below.)
- Patient Care Project reports are submitted in conjunction with the CAA Report. Please review the CAA Reporting Guidelines for more details and to avoid sending duplicate report submission confirmation forms and video submission forms.

Formatting & Style

- Reports may only be submitted as a Word document or PDF.
- Reports should be double-spaced using a 10-point font, with 1” margins (top, bottom, left and right).
- The header of each report must contain your Chapter’s Name (first line) and the Report Name (second line).
- The end of the report essay must contain word count.
- The footer of each page must contain Page X of Y.
- Files must be labeled as “Chapter Name Operation Diabetes Report.doc or .pdf”.

Supporting Materials

Photographs

Photographs must be submitted electronically through the Chapter’s Dropbox folder and must be labeled “**Chapter Name OD Pic #.jpg**” (i.e. “U Arizona OD Pic 1.jpg” or “SDSU OD Pic 2.jpg”). Photographs should be submitted separately of the text document of the report. Once photographs have been submitted electronically to APhA, the Association reserves the right to use these photographs in APhA publications, marketing materials, and during APhA meetings.

Up to 10 photographs may be submitted.
Original Documents and Supporting Materials
Additional supporting materials may be included to illustrate the activities described in your essay; however, any submitted items should be documents/materials originally created or developed by the chapter. All supporting materials must be scanned and submitted electronically to the Dropbox folder as a PDF. Files must be labeled “Chapter Name OD SM #.pdf” (i.e. “U Arizona OD SM 1.pdf” or “SDSU OD SM 4.pdf”).

Up to 10 supporting materials may be submitted.

Videos
Due to the large size of video files, only the URL, title, and 35 word synopsis of the video on the official APhA-ASP Video Submission Form (Appendix L of the CAA Report Guidelines) will be accepted. APhA Student Development Staff may request the original file. Once videos have been submitted electronically to APhA, the Association reserves the right to use or link these videos in APhA resources, marketing, and during APhA meetings. Only one copy of this form should be submitted per chapter.

Up to 5 videos may be submitted with the report.

CHAPTER DROPBOX FOLDERS

In an effort to improve file transmission, security, and ease of uploading CAA Reports and Patient Care Project Reports, APhA-ASP will only accept reports, forms, photographs, supporting materials, and videos via each chapter’s Dropbox Folder. Dropbox is a Web-based file hosting service that uses networked storage to enable users to store and share files with others across the Internet using file synchronization.

1. In May 2012, each Chapter President and Chapter Advisor received an email invitation from the APhA-ASP@APhAnet.org Account to join a Dropbox Folder with the Chapter’s Name (example: University of Arkansas for Medical Sciences – Chapter Reports).

2. To share the folder with current leaders, the Chapter President and/or Chapter Advisor would need to:
   o Send an email invitation to the appropriate Chapter Co-Advisor, and/or Chapter Student Leader who would be placed in charge of the Chapter Folder; and/or
   o Share the Chapter Folder with the necessary Chapter Executive Committee Members and Chapter Patient Care Project Chairs.

3. Each Chapter is responsible for all of the files, forms, photographs, and supporting materials uploaded to the Dropbox folder. Please only use this as a method to transmit your files to APhA, and not as your folder to store all of the original files. On July 16, APhA staff will begin moving all files from the Dropbox Folder to APhA’s server. Therefore, please keep your original files stored elsewhere.

4. Create the following folders (if applicable) for the Chapter Achievement Awards and Patient Care Projects in the main folder (please see the following screen shot for further information):
   o Chapter Achievement Awards
   o Heartburn Awareness Challenge
   o Operation Diabetes
   o Operation Heart
   o Operation Immunization
5. Please note that there should only be two forms in the main folder: **Award Submission Confirmation Form** and the **Video Submission Form**. All other forms should be listed in their respective folders.

6. Once completed, **one** copy of the completed **Award Submission Confirmation Form** should be sent via email to APhA-ASP@APhAnet.org, with the subject line “Chapter Name - CAA and PCP Reports”, notifying the Awards Selection Committee and APhA Staff that you have uploaded your report(s), forms, photographs, and supporting materials to your Chapter’s Dropbox folder. Only one form per chapter should be submitted. **The deadline for submitting this form via email is July 15.**

7. **Do not create sub-folders** under the Chapter Achievement Awards or Patient Care Project Folders. The APhA-ASP Awards Standing Committee and APhA Student Development Staff have found that multiple folders (while it may assist you with organizing the file) leads to reports, forms, photographs, supporting materials, and videos either not being submitted, missed, or not copied over to APhA’s server correctly. Please see the screen shot included in the CAA Reporting Guidelines as an example of how reports, forms, photographs, supporting materials, and videos should be listed. **The same procedure will be used for the Operation Diabetes folder as well.**

8. If you need assistance, have questions, or need more information, please contact Crystal Atwell, Director of Student Development by phone (800) 237-APhA ext. 7586, or via email at CAtwell@APhAnet.org.

9. **As a reminder, all reports must be received via the Chapter’s Dropbox Folder by 11:59pm (PST) on July 15.** Dropbox provides a time/date stamp on each file. Files with a time/date stamp after the deadline will not be accepted.
SECTION I: CHAPTER CONTACT INFORMATION

School or College of Pharmacy Name: __________________________________________

APhA-ASP Chapter President Name: __________________________________________

APhA-ASP Chapter President Email Address: ______________________________________

APhA-ASP Chapter Advisor Name: __________________________________________

APhA-ASP Chapter Advisor Email Address: ______________________________________

Student Project Coordinator: __________________________________________

Student Coordinator Email Address: __________________________________________

By signing this agreement, I attest that the following hold true to the best of my knowledge:

- I understand the laws of my state and I am confident that participation in Operation Diabetes is within the guidelines of the law and has not violated any laws of my state.

- I have ensured that all students participating in Operation Diabetes are properly trained with the knowledge of diabetes required for community screenings and education.

- I have followed the guidelines of Operation Diabetes and will submit all necessary documentation when needed. I understand that data submitted may be included for publication in aggregate with data collected from other APhA-ASP Chapters’ projects as well.

- I hereby state that the following materials are the work of our chapter’s members and the activities represented in this report are an accurate portrayal of the work our chapter has completed.

Signature of Student Coordinator ____________________________ Date __________

DEADLINE: Entries must be submitted electronically via the Dropbox folder no later than 11:59pm PST July 15.
SECTION II: ESSAY

Please describe the planning, implementation, and outcomes of your chapter’s Operation Diabetes activities, specifically highlighting the significance of your accomplishments and how they affected your chapter members, community, and/or the profession of pharmacy. Please do not list dates of events, activities, and programming, as this is already addressed by the chronological list.

Information provided in the essay may include, but is not limited to:

• Planning
  o Committee structure indicating chair, vice chair
  o Chapter member recruitment and participant training
  o Details of Operation Diabetes planning sessions
  o Your Chapter’s Goals and Objectives for the Operation Diabetes campaign

• Implementation
  o Promotion of the campaign, including media coverage and materials unique to your campaign
  o Education and screenings provided to the public
  o Collaboration with the community and other professional health care organizations for your Operation Diabetes campaign
  o Innovative or unique aspects of your Operation Diabetes campaign
  o Explanation of your project sites and settings

• Outcomes
  o How your campaign met the goals and objectives of Operation Diabetes
  o Describe the impact your Operation Diabetes campaign had on student pharmacists, the profession of pharmacy, and most importantly the public you served
  o Describe how your chapter achieved its goals and any possible improvements that could be made for next year

Report Essays may not exceed 2000 words. If your essay exceeds 2000 words, only the first 2000 will be submitted to the Awards Selection Committee. A final word count is required at the end of the report essay.
SECTION III: CHRONOLOGICAL LIST

Please include a chronological list of all Operation Diabetes activities that occurred during the reporting cycle (June 1, 2011 – May 31, 2012) reporting cycle. The list should not be lengthy, but a brief record of all chapter projects, community programs, meetings, and activities related to Operation Diabetes. Activities may include, but are not limited to, health fairs, patient screenings, education programs, chapter meetings, committee meetings, executive committee meetings, fundraisers, legislative or policy events, community service projects, professionalism programming, American Pharmacists Month programming, social events, etc.

There is no word limit (except for the brief synopsis – less than 50 words) or page limit for the Chronological List. The following template must be used for the Chronological List:

• Activity/Event/Meeting/Project(s):
• Date(s):
• Location(s):
• Promotional Materials:
• Target Audience:
• Faculty Present:
• Additional Pharmacists (non-faculty) Present:
• Chapter Members Present:
• Patients Attended Event(s):
• Patients Screened for:
  o Blood Glucose and/or A1C Level
  o American Diabetes Association (ADA) Risk Assessment
• Patients Received Health & Wellness/Clinical Services for:
• Patients Reached Through Public Relations:
• Event Held in Collaboration with:
• Event Type (New or Continuing/Annual Initiative):
• Synopsis (less than 50 words for each activity listed):

Please see Chapter Achievement Awards Reporting Guidelines (Appendix A) for additional information/examples on creating the chronological list. The guidelines provide examples of how to list an individual event, month long program, and reoccurring events. The guidelines can be found online in the Awards and Scholarships section of pharmacist.com/students.
SECTION IV: EXECUTIVE SUMMARY

Please see the PDF Form to complete your Chapter’s Executive Summary. The following questions will be asked on the form based upon the data in your Chapter’s Chronological List:

- Total number of patients screened for:
  - Blood Glucose/A1C Level - 
  - ADA Risk Assessment - 

- Total number of patients referred to their primary care provider.

- Total number of patients who received Health & Wellness/Clinical Services.

- Total number of patients reached through public relations initiatives.

- Total number of student pharmacists involved in all projects.

- Total number of faculty and staff involved in all projects.

- Total number of pharmacists (non-faculty) involved in all projects.

- Total number of events/projects conducted.
SECTION V: SUBMISSION CONFIRMATION FORM

Please refer to Appendix F of the CAA Reporting Guidelines for complete information on the required submission confirmation form. Only one submission form per chapter should be submitted. The guidelines can be found online in the Awards and Scholarships section of pharmacist.com/students.