Introduction

This issue of Pharmacy Précis presents the results of the Samford University Global Drug Information Service (SUGDIS) Quality Assurance Survey that is utilized to ensure that the SUGDIS objectives are being achieved as well as fulfilling the needs and expectations of our clients.

SUGDIS is a fee-for-service operation located in the McWhorter School of Pharmacy, Samford University in Birmingham, Alabama. The center focuses on three core activities: education, service, and research. Comprehensive drug information services are provided to over 120 pharmacies including hospitals and long-term care centers.

The SUGDIS main objectives are to:

- Teach pharmacy students, drug information residents, pharmacists, and other health care providers the skill of efficiently searching the literature, critically analyzing the information, and accurately communicating (both verbally and in writing) the response.
- Serve as an information resource center for faculty, students, and health care professionals.
- Provide comprehensive, objective, and unbiased information to health care professionals for decision-making and problem-solving activities.
- Provide drug information services to health care institutions for delivery of quality patient care.
- Conduct research for the advancement of drug information and pharmacy practice.

Description of SUGDIS

SUGDIS, an academic and service unit of the McWhorter School of Pharmacy, completes projects that include pharmacy practice and medication use evaluations. SUGDIS is committed to assisting pharmacists who are engaged in patient care activities and is actively pursuing relationships with organizations representing them.
Samford University Global Drug Information Service

The overall services provided include, but are not limited to:

- Drug information consults
- Committee support (Pharmacy and Therapeutics [P&T], Institutional Review Board [IRB], Infection Control)
- Formulary management
- Policy and procedure development
- Drug therapy practice guidelines generation
- Drug formulary list generation
- Antibiotic Management Program
- Drug Usage Evaluation (DUE) and Adverse Drug Reaction (ADR) programs
- Long-term care consulting

Teaching programs include didactic courses in Drug Information Systems and Drug Literature Evaluation and the experiential-based learning experiences for Pharm.D. students completing the Drug Information Advanced Pharmacy Practice Experience (i.e., clerkship rotation). Information services are provided to health care professionals of the subscribing institutions and Samford faculty by a staff of three drug information specialists, Drug Information Resident, School of Pharmacy librarian, and clerical support. SUGDIS has extensive electronic drug information databases and resources. Furthermore, an extended collection of other resources (textbooks, journals, databases, etc.) is available within either the center or the Samford University Davis Library. Access to pharmacy faculty who specialize in various types of pharmacy practice and medical experts as consultants to SUGDIS expand the expertise available to answer questions and solve problems for the center’s subscribers.

SUGDIS personnel are active consultants for many different hospitals and other health care entities in addition to participating in national organizations. Responding to drug information requests consumes approximately 35 percent of daily activities while a portion of the remaining time is involved at the drug policy level with P&T, IRB, and Infection Control Committee support. Formulary evaluation is another crucial responsibility for SUGDIS as is continuing education for medical, pharmacy, and nursing personnel.

**Question Requests during 2008**

During the year 2008, SUGDIS received over 550 questions from the health care community. Most of the questions received by SUGDIS were from pharmacists practicing in a hospital setting, long-term care facility, or community pharmacy/ambulatory care setting. Questions concerning drug therapy, drug identification, adverse drug reactions, drug interactions, dosing, monograph information, drug administration and compatibility/stability comprised over 75 percent of the questions received by SUGDIS. The remaining 25 percent consisted of over 30 different topics that include disease states, IV compatibility/stability, alternative medicine, pharmacy law, drug approvals, toxicity/poison, foreign drug ID, unlabeled drug use, investigational drugs use, pregnancy/lactation, and literature evaluation. Questions varied in intensity (e.g., from drug identification to providing therapeutic recommendations) and time required to complete the request (from 15 minutes to greater than 12 hours). Over 70% of the questions answered during 2008 were from clients. The majority of the remaining questions came from the Samford community or Samford alumni.

As part of the center’s educational responsibilities, Pharm.D. advanced pharmacy practice experience students participate in center activities by answering questions under the guidance of a Pharm.D. faculty member. Upon receiving a call, the student asks a series of questions to obtain the information needed to thoroughly research and respond to each request. By participating in the question answering activity, the Pharm.D. student learns to answer drug information questions using an efficient search process, enhances/refines written and verbal communication, completes a thorough literature search, improves problem-solving, decision-making, and literature analysis skills.
Question Quality Assurance Survey 2008

To ensure that the SUGDIS question processing procedures, resources, and staff are meeting the needs of clients, a questionnaire is sent to clients to obtain feedback pertaining to the drug information question service provided by SUGDIS. Each month, the SUGDIS Coordinator randomly selects at least 17 health care providers who have requested information from SUGDIS. Once a health care caller has been surveyed, this individual is not eligible to be surveyed again for six months. The six-month lag time was chosen so that frequent callers would not be continually surveyed.

The drug information question form is divided into four sections.

- The first section of the survey is designed to gather the following data:
  - What is your role in the health profession (i.e., pharmacist, physician, nurse)?
  - What is your primary practice site?
  - Are you a SUGDIS subscriber?
- The main section of the survey contains questions concerning the drug information request(s) and response(s).
  - Was your telephone call handled in a professional manner?
  - Was your question(s) answered with pertinent information?
  - Was your question(s) answered within a reasonable time period?
- The next section of the survey contains questions concerning after hours telephone calls.
  - After SUGDIS hours, were you able to leave a message on the answering machine?
  - If you left a message, was your call returned in a timely manner?
- The final section of the survey provides space for your comments. If your experience with SUGDIS is positive, SUGDIS would like to know that our service is sufficient to meet your needs. If you see a problem with the service, please comment so problems can be identified and corrected.

During the 2008 calendar year, a total of 191 surveys were mailed. The response rate of completed surveys returned was 31 percent of the surveys mailed. This is a decrease of 3 percent compared to last year. The number of surveys returned by the post office as undeliverable was less than 5 percent. The information obtained via the survey is vital to the structure and process of SUGDIS activities in terms of quality improvement. The following pie charts display the survey results for the year 2008. Survey results for previous years have been published in Pharmacy Précis issues. Previous issues are available upon request.
The response(s) answered the intended question(s)

- Strongly Agree: 64%
- Agree: 31%
- Neutral / No Response: 2%
- Disagree: 3%
- Strongly Disagree: 0%

Information was sufficient to apply in my practice setting

- Strongly Agree: 64%
- Agree: 31%
- Neutral / No Response: 2%
- Disagree: 3%
- Strongly Disagree: 0%

Response was provided within requested time period

- Strongly Agree: 66%
- Agree: 22%
- Neutral / No Response: 10%
- Disagree: 2%
- Strongly Disagree: 0%

Written and/or verbal response(s) were handled professionally

- Strongly Agree: 63%
- Agree: 19%
- Neutral / No Response: 16%
- Disagree: 2%
- Strongly Disagree: 0%

After SUGDIS hours, were you able to leave a message on the answering machine?

- Yes: 12%
- No: 0%
- Not Applicable: 88%

If you left a message on the answering machine, was your call returned?

- Yes: 12%
- No: 0%
- Not Applicable: 88%
Below are bar charts that compare the quality assurance survey results of the past five years.

**Profession**

- Pharmacist
- Physician
- Nurse
- Dentist
- Other

**Primary Practice Site**

- Hospital
- Comm Pharm
- HMO
- Long-Term Care
- Other

**The response(s) answered the intended question(s)**

- Strongly Agree
- Agree
- Neutral/No Resp.
- Disagree
- Strongly Disagree
Information was sufficient to apply in my practice setting

![Graph showing percentage of responses from 2004 to 2008 for information sufficiency.]

Response was provided within requested time period

![Graph showing percentage of responses from 2004 to 2008 for response time.]

Written and/or verbal response(s) were handled professionally

![Graph showing percentage of responses from 2004 to 2008 for response professionalism.]

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Samford University Global Drug Information Service
The majority (97%) of individuals surveyed were pharmacists. The remaining 3 percent consisted of forensic scientists and nurses. Calls received by SUGDIS totaled over 550. A small percentage of calls were received from physicians, forensic scientists, dentists, consultants, and patients. The current year responses and the comparison of the past four years indicate that 95 percent of the survey responders felt the information supplied by SUGDIS sufficiently answered the question presented and responses were handled professionally. This was a slight decrease from the year 2007 (97%). Survey responses that indicated disagree (3%) indicated that a response was supplied by SUGDIS, but SUGDIS was not able to provide a definitive answer to the question based upon research. The survey results confirm that the after hours process is meeting the needs of clients. If a message is left, the call is returned promptly the next business day. Only 12 percent responded that they had utilized the after hours messaging service. The survey indicated that all clients that left messages received a response the next business day.

An area that SUGDIS is constantly striving to improve is providing the response to a question within the requested time period and to complete the task thoroughly by following an efficient search process. The SUGDIS goal is to meet the subscriber's need in a professional manner. Of the respondents, 95 percent felt the response answered the intended question while 88 percent felt the response was provided within a reasonable time period. The response being provided within a reasonable time period declined slightly. Over 10 percent did not respond or indicated neutral when asked about the response being provided within a reasonable time period. When a call is taken, one of the initial questions asked by the student is the time frame in which the client needs the requested information. If problems are encountered while researching a question, the requestor is called and provided an update on information located and the progress being made. The drug information center faculty/staff request that the caller inform the student when the question concerns an urgent matter. In this event, the drug information center faculty is immediately notified and the response is formulated and provided to the caller. Afterwards, the question answering process is reviewed with the student (for the learning experience).
SUGDIS wishes to remind the subscribers that each question is used as a learning experience. After the student obtains the question information, a drug information center faculty member discusses with the student a process to search and analyze the literature to locate plus formulate a response. Also, the faculty member and the student discuss the advantages and disadvantages of the references/resources that may be used to develop a response. After the student conducts the research and prepares an answer, the response is reviewed by the faculty member. If the information supplied in response to a question is incomplete or more information is needed, please advise the student and preceptor of this situation.

SUGDIS has utilized the survey process for several years. The survey responses identify areas for improvement in the SUGDIS process. The comments and suggestions from the survey provide SUGDIS with information to improve services offered to the subscriber for use in his/her daily practice. Individuals surveyed are encouraged to utilize the comment section to expand on the particular topic(s) marked as disagree or strongly disagree.

The Drug Information Line (205-726-2659) is programmed to forward calls to the SUGDIS Coordinator's office and then to the circulation desk to ensure that your call is answered and assistance provided promptly. Only in the event that all three lines are busy is the call answered by voice mail during normal business hours (8:00 a.m. to 4:30 p.m. CST). For urgent situations, the after hours message provides instructions for the procedure to contact a drug information specialist (205-994-1762). SUGDIS is available 24 hours a day, seven days a week.

The SUGDIS staff appreciates you completing and returning the survey information. Feedback from the survey is essential to the process of improving SUGDIS activities. Please provide suggestions or comments to SUGDIS by telephone (205-726-2659), e-mail (sugdis@samford.edu), or FAX (205-726-4012).

In an effort to improve efficiency and go green, SUGDIS is implementing an on-line drug information question survey for clients. If you are selected to be surveyed, an email will be sent from the email address sugdis@samford.edu with the subject of SUGDIS Question Response Survey. The email will contain a link to the survey website. Survey responses are anonymous unless you choose to add your name to the survey. Watch your email for the opportunity to evaluate the service received when SUGDIS completes your next question request.

**SUGDIS Personnel**

On a daily basis the SUGDIS faculty, drug information resident, staff, and advanced pharmacy practice experience Pharm.D. students handle SUGDIS clients’ questions and needs. Six to eight drug information advanced pharmacy practice students are in the center ten months of the year to research and answer questions, complete weekly publications, and assist with projects. The students complete the learning experience under the guidance of three Drug Information Specialists:

- **Maisha Kelly Freeman, Pharm.D., BCPS, Director of SUGDIS.**
  Dr. Freeman joined SUGDIS in 2003. She is a 2002 graduate of the University of North Carolina at Chapel Hill. Upon graduation, she completed an American Society of Health-System Pharmacy (ASHP)-accredited drug information specialty residency at the University of Maryland in Baltimore, MD. She has been recognized as a Board Certified Pharmacotherapy Specialist since 2004. Dr. Freeman is also the director of the Drug Information Residency Program at Samford University Global Drug Information Service. She is currently a member of AMWA, ASHP, ACCP, Phi Lambda Sigma and Rho Chi. She is a reviewer for the *American Journal of Health-System Pharmacists* and *Annals of Pharmacotherapy*. Dr. Freeman has authored almost a dozen publications in the *American Journal of Health-System Pharmacists, Annals of Pharmacotherapy, American Journal of Pharmaceutical Education, Drug Information Journal, US Pharmacist*, and *Drug Information: A Guide for Pharmacists.*
Samford University Global Drug Information Service

Terri M. Wensel, Pharm.D., Drug Information Specialist.
Dr. Wensel joined SUGDIS in October of 2008. She is a 2005 graduate of Auburn University Harrison School of Pharmacy. After graduation, she completed an ASHP-accredited drug information specialty residency at DCH Regional Medical Center in Tuscaloosa, Alabama. Prior to joining Samford, Dr. Wensel was a faculty member at Wingate University School of Pharmacy in Wingate, North Carolina. She is currently a member of ASHP, AACP, ACCP, and Phi Lambda Sigma. She also has published in *Annals of Pharmacotherapy, US Pharmacist, Journal of Family Practice,* and *American Family Physician.* Dr. Wensel also serves as a reviewer for *Annals of Pharmacotherapy* and *US Pharmacist.*

Peter J. Hughes, Pharm.D., Drug Information Specialist.
Dr. Hughes is the most recent addition to the SUGDIS staff. He is a 2007 graduate of the Samford University McWhorter School of Pharmacy. Upon graduation, Dr. Hughes completed a Drug Information Residency with SUGDIS. Prior to returning to SUGDIS in July 2009, he practiced at Riverview Regional Medical Center in Gadsden, Alabama. He is currently a member of ASHP and APhA. Dr. Hughes also serves as a reviewer for *Annals of Pharmacotherapy.*

SUGDIS is pleased to announce that Dr. Temeka Borden has accepted the 2009-2010 Drug Information Resident position. Dr. Borden graduated from Samford University in May 2009 with a Doctor of Pharmacy degree. She is assisting the Director and the SUGDIS staff with the activities of SUGDIS as well as completing an independent research project.

Support staff that assist with SUGDIS activities are Dr. Bob Schrimsher, Pharmacy Librarian, and Sandra Boyken, SUGDIS Coordinator.

**Contacting SUGDIS**
If you have a drug information request, please call (205) 726-2659. For your convenience, this number is the direct drug line that allows you to speak with the individual responsible for drug information requests. If you need to contact SUGDIS via fax, please dial (205) 726-4012. Also, SUGDIS can be contacted by e-mail at sugdis@samford.edu.

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