Approved: March 17, 2011
Date

MINUTES OF THE HOUSE VISION 2020 COMMITTEE

The meeting was called to order by Chairman Tom Sloan at 3:30 p.m. on February 21, 2011, in Room 144-S of the Capitol.

All members were present except:
Representative Gail Finney- excused
Representative Brett Hildabrand- excused
Representative Don Hineman- excused
Representative Mike Peterson- excused

Committee staff present:
Corey Carnahan, Kansas Legislative Research Department
Jay Hall, Kansas Legislative Research Department
Mary Koles, Committee Assistant

Conferees appearing before the Committee:
Sunee Mickle, Blue Cross and Blue Shield
Bruce Witt, Via Christie Health System
Janell Moerer, Via Christi Health System
Mark Gagnon, Via Christi Health System
Debra Billingsly, State Board of Pharmacy

Others attending:
See attached list.

Chairman Sloan greeted the committee and welcomed the conferees.

Sunee Mickle, Director of Government Relations, Blue Cross and Blue Shield of Kansas, addressed her company's coverage for telemedicine services. Since 1993, BC-BS has reimbursed specialists (oncologists, psychologists, etc) for telemedicine consultations. In May 2008, BC-BS began reimbursing for telemedicine facility fees/originating site fee. Few insurers in Kansas cover the originating site fee. The demand for telemedicine services is low; most of BC-BS's major medical health insurance population is under the age of 65 and does not require the same types of services as Kansans who are covered by Medicare. In 2010, the majority of the telemedicine diagnosis codes were related to psychiatric consultations. Ms Mickle provided a map of BC-BS's service area showing the facilities that billed for telemedicine services in 2010. (Attachment 1)

Following Ms Mickle's remarks, questions were asked by Representatives Don Hill, Vern Swanson, and Ron Worley.

Bruce Witt, Corporate Compliance Officer, Preferred Health System, introduced Janell Moerer and Mark Gagnon, both from Via Christie Health System.

Janell Moerer, Vice President, Business Development, Via Christi Health, discussed Tele-health and virtual care. Via Christi believes that healthcare delivery and reimbursement is not sustainable in its current form and has designed services and care models using enabling technology that address these factors. Via Christi On Call, a test program (June 2010 – Dec 2011), allows patients to select a video visit, chat visit, or telephone visit with a primary care provider twelve hours per day/seven days per week. To date, providers and patients like the convenience of online care; adoption is slow; people are willing to pay for online care; and other online care models will be tested such as surgeons for pre and post op patient visits.

Via Christi InMy Home, provides services, support and Smart Home technology to enable older adults to remain in the home. The home is monitored 24/7. Via Christi believes that more care will be provided in the home due to advances in enabling technology and innovation in care models. Also, older adults want to remain in their homes and are willing to pay for services and programs that will help them remain safely at home. They are comfortable with technology that allows them to do so and Personal Care Coordination effectively supports people as they age. (Attachment 2)

The minutes of the Vision 2020 Committee at 3:30 p.m. on February 21, 2011, in Room 144-S of the Capitol.

Ms Morer mentioned the Via Christi ePharmacy initiative and introduced Mark Gagnon, Director of ePharmacy Via Christi Health. Mr Gagnon discussed the projected national shortage of pharmacists by 2020 and the current shortage of pharmacists in Kansas. He also mentioned the number and cost of adverse drug events annually. The goal of Via Christi's ePharmacy is to increase access to a hospital pharmacist in order to improve patient safety using enabling technology. He described the two components transforming pharmacy service: remote order entry (how it works) and telepharmacy/video verification (how it works). Currently, Via Christi provides services to eight rural Kansas hospitals. He noted that Kansas is one of four states that has telepharmacy language. Included with his written testimony is a case study which both Gagon and Moerer helped author: James C. Garrelts, et.al., "Impact of telepharmacy in a multihospital health system," American Journal of Health – Syst Pharm, vol 67, Sept 2, 2010, pages 1456-1462. (Attachment 3)

Following Moerer and Gagnon's presentations, questions were asked, comments made and discussions ocurred. Those participating included, Chairman Sloan and Representatives Joseph Scapa, Barbara Bollier, Don Hineman, and Vern Swanson.

Debra Billingsly, Executive Director, State Board of Pharmacy, reported on two (2) telepharmacy regulations:

1. KAR 6822-5, electronic supervision of medical care facilities, pharmacy personnel, applies to hospitals when a pharmacist is not present. It was approved by the Rules and Regulations Committee, however, at the public hearing, it became apparent that it needed additional language. The language was added and the regulation should be approved soon.
2. KAR 6817-10, concerns retail branch pharmacies. Each licensed pharmacy is allowed one branch pharmacy that is within twenty to one hundred miles of the parent/licensed pharmacy. Ms Billingsly expects this regulation will be in place by April 1, 2011.

Questions and comments followed her report. Participants included Chairman Sloan and Representative Don Hill.

Chairman Sloan thanked the conferees for their presentations.

Chairman Sloan noted several additional items included in the information distributed today: two draft letters, one to Dr. Andy Tompkins, Board of Regents, and another to Dave Larson and Don Heiman, Computer Services and IT respectively. (Attachment 4) He asked committee members to read the letters and suggest changes and additions by Friday, February 25. He also noted an article regarding higher education and suggested committee members read it: Daniel deVise, "Eight ways to get higher education in shape," The Washington Post, February 20, 2011. (Attachment 5)

The next meeting is on call of the chair.

The meeting was adjourned at 4:50 p.m.

Committee Assistant's note: Testimony for Debra Billingsley for today was delayed. She provided testimony, a letter reporting the status of the telepharmacy regulations she discussed during the committee meeting, and a report of a meeting on March 1, 2011, of the joint Committee on Administrative Rules and Regulations regarding the proposed telepharmacy regulations – all are included with today's minutes and were sent to Committee members shortly after they arrived, March 23, 2011. (Attachment 6)

Guest List

House Vision 2020 Committee

Monday, February 21, 2011

Name	Client/Authority
Kasey Klunde	KAHP
Caleb Smith	Student
Debra Billingsley	KBOP
Bruce Cook	Via Christi Health
Jarell Mo	Via Christi Health
Mark Gagnon	Via Christi Health
Susie Mickle	BCBSKS
Sandy Braden	OBA
George Stafford	
Chad Austin	KHA
Chris Parker	Student - MSW

BlueCross BlueShield of Kansas*

1133 SW Topeka Boulevard
Topeka, Kansas 66629-0001

Web site: www.bcbsks.com

In Topeka – (785) 291-7000
In Kansas - (800) 432-0216

Statement of Sunee N. Mickle, Director, Government Relations
Blue Cross and Blue Shield of Kansas, Inc.

House Vision 2020 Committee
February 21, 2011

Good Afternoon, Chairman Sloan and Members:

I appreciate the opportunity to speak with you about Blue Cross and Blue Shield of Kansas' telemedicine program. I am Sunee Mickle, the Director of Government Relations, at Blue Cross and Blue Shield of Kansas which is headquartered just blocks from the Statehouse here in Topeka. Blue Cross and Blue Shield of Kansas is a mutual insurance company and we are the largest health insurer in the state. Our mission is to be the best at providing health insurance in Kansas for the approximately 890,000 Kansans that we serve.

We are a licensee of the Blue Cross and Blue Shield Association and we operate separately and independently from the 38 other Blue Plans in the United States. But we all cooperate with each other to provide inter-plan services for all of our customers. One example of this is demonstrated by our working relationship with Blue Cross and Blue Shield of Kansas City. The service area of my organization is 103 of Kansas' 105 counties. Johnson and Wyandotte counties are serviced by the Kansas City Plan.

Currently, Blue Cross and Blue Shield of Kansas contracts with 99% of all medical doctors and with 100% of medical facilities in Kansas. A large number of our members and many of our employees live in rural communities; they are not in the Topeka/Wichita urban areas. We are well aware of the challenges that face our members, and we understand how difficult it can be for health care providers and hospitals to deliver a variety of quality health care services in a state with so many rural communities. That is one reason that Blue Cross and Blue Shield of Kansas began covering telemedicine services for its members. Since January 1993, we have reimbursed specialists such as oncologists and psychologists for telemedicine consultations. This allows members in areas such as Sedan to have access to quality specialty care without leaving their community. And in May 2008, we began reimbursing for telemedicine facility fees or what are sometimes referred to as the originating site fee.

Specialty providers can bill Blue Cross and Blue Shield of Kansas for consultations, office and other outpatient visits, individual psychotherapy, pharmacologic management, psychiatric diagnostic interview examinations, neurobehavioral status exams, individual medical nutrition therapy, and end stage renal disease related services. We also allow for additional telemedicine services to be billed when they are medically necessary and a covered benefit. This same information can also be found in the 2008 Telemedicine Survey that was conducted by the Kansas Insurance Department.

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Blue Cross and Blue Shield of Kansas is unique. During a recent poll of the 38 other Blue Plans in the country, only a few, including Blue Cross and Blue Shield of Kansas City, reimburse for telemedicine services. And based on anecdotal information from some Kansas legislators and health care providers, we are one of the few insurers operating in Kansas who cover the originating site fee. Rural health care facilities - not just patients - benefit from our commitment to reimburse for telemedicine services. Patients who live near these rural facilities can stay and receive specialty health care services at their local facilities rather than traveling to and from care outside of their community. Therefore, telemedicine also helps local providers maintain their patients' medical homes and includes them in their specialty care.

Our members' needs drive our coverage and reimbursement decisions. Blue Cross and Blue Shield of Kansas monitors our members' requests for services each year, but the demand for telemedicine services is low. Most of our major medical health insurance population is under the age of 65, so they do not require the same types of services as Kansans who are covered by Medicare. Our providers and hospitals have received information explaining that a telemedicine service must involve a physician's specialty that is not otherwise available in the community in order for it to be covered under one of our plans. This meets the needs of our members who do not always have access to treatment for illnesses such as depression and congestive heart failure or for services such as chemotherapy in their rural community.

Today, you should have also received a handout that shows Blue Cross and Blue Shield of Kansas' service area and the facilities that billed for telemedicine services in 2010. Many of the specialists who provided care for our members were located at the University of Kansas Medical Center and several other locations in the Kansas City metro area. In 2010, we determined that the majority of diagnosis codes were related to psychiatric consultations. And with the exception of Hays Medical Center, the hospitals that billed for telemedicine services are located in very small towns. For example, Rooks County Medical Center in Plainville billed for telemedicine services. The facility has less than 20 beds and Plainville has just over 2000 residents.

As with many commercial insurers, Blue Cross and Blue Shield of Kansas is closely monitoring federal health care reform activities and waiting to see whether telemedicine services will be included in the essential benefits package. Beginning in 2014, insurance plans sold on the health insurance exchange and all state Medicaid plans will have to provide coverage for essential benefits. If Kansas mandates coverage for benefits that are not included in the Affordable Care Act's essential benefits package, the state will be on the hook for the cost of covering those benefits. This is one reason that insurers have asked the legislature to hold off on adding new health insurance mandates. We do not have a clear picture as to how much additional benefits, such as telemedicine, may ultimately cost the state of Kansas.

Despite all of this, Blue Cross and Blue Shield of Kansas is committed to providing our members access to specialty health care services through telemedicine. The health and wellbeing of Kansans is important to us. We will update the legislature and work with our provider community once we have more information about the Affordable Care Act's essential benefits package.

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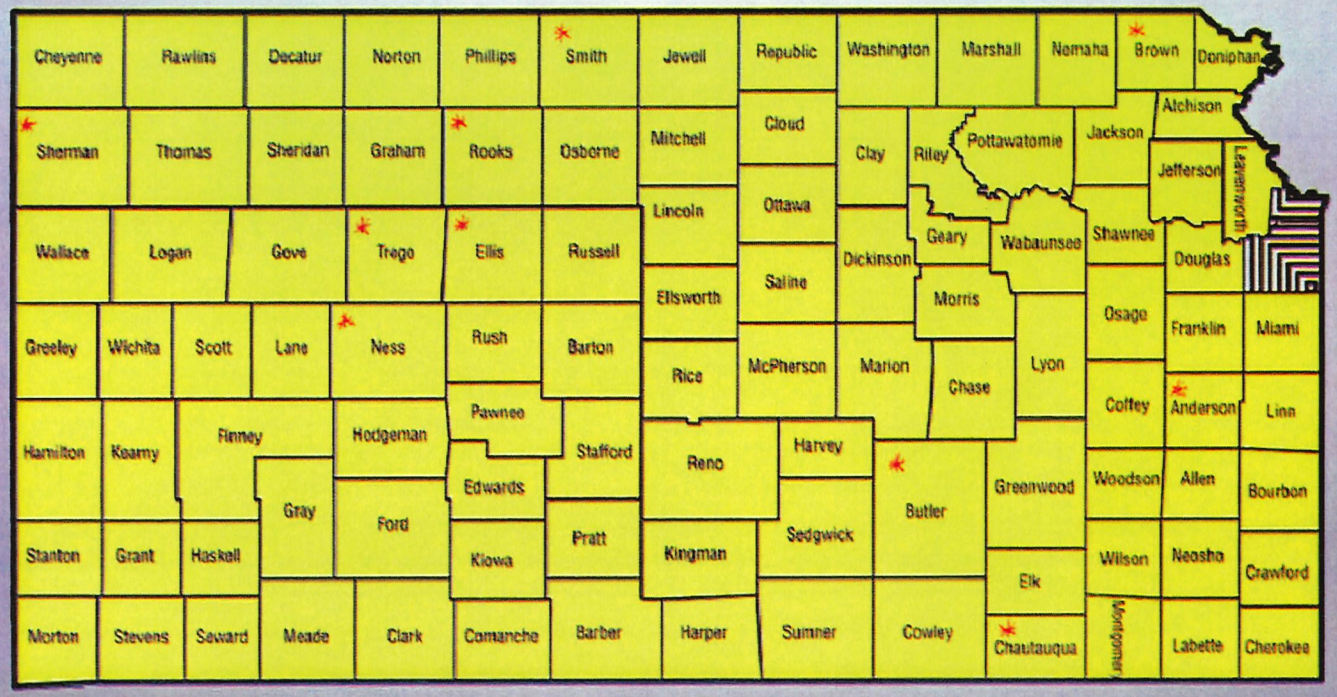
In Kansas - (800) 432-0216

Thank you for time. Do you have any questions about Blue Cross and Blue Shield of Kansas' telemedicine coverage?

Blue Cross and Blue Shield of Kansas
Active Telemedicine Locations



Hays Medical Center - Hays, KS - Ellis Co.
Susan B. Allen Mem Hosp - El Dorado, KS - Butler Co.
Grisell Mem Hosp Dist #1 - Ransom, KS - Ness Co.
Anderson Co. Hospital - Garnett, KS - Anderson Co.
Smith County Mem Hosp - Smith Center, KS - Smith Co.
Rooks Co. Health Center - Plainville, KS - Rooks Co.
Horton Community Hosp - Horton, KS - Brown Co.
Goodland Regional Med Center - Goodland, KS - Sherman Co.
Trego Co Lemke Mem Hosp - Wakeeney, KS - Trego Co.
Sedan City Hospital - Sedan, KS - Chautauqua Co.

BlueCross BlueShield of Kansas

Via Christi HEALTH

Date: February 21, 2011

To: Representative Tom Sloan, Chair
House 2020 Vision Committee
Members of the House 2020 Vision Committee

From: Janell Moerer
VP, Business Development
Via Christi Health

Re: Tele health and virtual care

Testimony on Tele health and virtual care services

In FY 2010, Via Christi Health provided $82.8 million in benefit to the communities we serve. This included more than $48.5 million in charity care and more than $17 million in unpaid costs of Medicaid services provided. Via Christi Health employed more than 10,000 and generated $989 million in revenue in 2009. We are affiliated with the Marian Health System and Ascension Health.

Via Christi Health's two key directional strategies are Perform Excellently and Healthcare Transformation. The strategic direction, Healthcare Transformation, is focused on developing new systems of care and/or care delivery redesign with objectives to a) improve access, b) improve patient safety and outcomes and c) flatten the cost curve. Via Christi's view is that healthcare delivery and reimbursement is not sustainable in the current form. The cost, supply and demand for healthcare services, and workforce shortages are factors that create a convergence towards an unsustainable model for the future. Therefore, Via Christi has invested resources to design services and care models through the use of enabling technology that address the converging factors and result in viable, cost effective healthcare for Kansas citizens. Several of these care models are outlined below and represent the tangible efforts and innovation that is part of the Via Christi Healthcare Transformation strategy.

Via Christi eICU provides 24/7 critical care support to all Intensive Care Units (ICU) throughout Via Christi including our hospitals in Wichita, Pittsburg, and Manhattan. The team of highly trained ICU nurses and Intensivists, critical care physicians, are located in Wichita at a central office that is filled with large monitors for two way audio/video communication as well as 24/7 continuous physiological monitoring and tracking. This type of specialized innovation provides additional care support for our sickest patients and to the bedside clinical providers on a continuous basis. This capability would be impossible without the technology application and

ability to telecommunicate (two way audio/visual). The case for eICU is further supported given the growing nursing shortages and the small supply of Intensivists. Both of these clinical professionals provide the best standard for ICU care so leveraging their skills through eICU ensures optimal care to large and small hospitals.
What we have learned:

- Improved ICU outcome measures due to combined efforts of the bedside providers and eICU.
- Remote care support enables bedside staff to optimize their skills and time at the bedside.
- Leverage skills of a single provider across multiple settings: geography is not a barrier to care and expertise.
- Patients develop a comfortable relationship with their eICU provider who is on the "other side" of the camera.

Via Christi OnCall is a beta test in collaboration with Ascension Health whom Via Christi is an affiliate system. The Via Christi OnCall service provides online care for patients to primary care providers using web 2.0 technology. The model is "Skype-like" and is designed to increase access to primary care through enabling residential technology. Both patient and provider can be connected through a laptop and local internet connection. A patient can select a video visit, a chat visit, or telephone with a primary care provider 12 hours per day/7 days per week. The beta test began June 2010 and will conclude December 2011. The test focus is to understand the receptivity to online care by patients and providers. In addition, various types of consult reimbursement methods are being tested and include health plan co-pay and cash payments. Via Christi is also working with primary care providers to imbed the technology into their daily practice to understand how access can be improved especially with follow up visits for chronic conditions such as diabetes. Via Christi has developed protocols and quality review processes to monitor and ensure the quality of the visits.
What we have learned:

- Providers and patients like the convenience of online care and rank their satisfaction 4.7 and 4.9 respectively on a 5 point scale (5 = highly satisfied)
- Adoption is slow but patients seem to have a good idea of what can be treated online.
- People are willing to pay for online care and Payers appear willing to pay for online care.
- Other online care models will be tested such as surgeons for pre and post op patient visits and an Via Christi OnCall work site center for employees

Via Christi InMyHome (IMH) is designed to provide services, support, and Smart Home technology to enable older adults to remain in their home, perhaps for a lifetime. This membership program is paid by the individual. A key feature in the program is a relationship with a Personal Care Coordinator and Smart Home technology. The Smart Home Technology includes personal emergency response (PERS) equipment for falls, as well as medication machines, wander guards, water and temperature sensors to name a few. An in home assessment by the Personal Care Coordinator helps the Member identify the optimal technology

for the home. The home is then monitored 24/7 with responses to alerts from the technology. These alerts help to identify significant changes in the Members daily living routine and thus care can be proactively provided with the goal to avoid unnecessary emergency department visits or hospitalizations. Via Christi researches and tests low cost, in home technology that will support individuals as they age in their homes. We believe that over time, more care will be provided in the home due to advances in enabling technology and innovation in care models. The cost of in home technology supported care will likely not accelerate at today's pace and thus flatten overall cost.

What we have learned:

- Older adults want to remain in their homes and are comfortable with technology especially if it will enable them to remain in their home.
- Personal Care Coordination is effective in supporting the wellness of people as they age – avoided hospitalizations, emergency department visits, and less likely to need long term care services.
- People are willing to pay for services and programs that will help them remain safely at home.

Via Christi ePharmacy was developed in fall of 2009 due to the growing demand for hospital pharmacists and the growing shortage. Via Christi was experiencing 3-4 pharmacist shortage at any given time and the shortage trajectory was/is escalating. ePharmacy provides remote order entry and pharmacy support through the use of enabling technology and by leveraging hospital pharmacist. Highly trained, Kansas licensed hospital pharmacists use a laptop or PC and their local internet to connect into a hospital/s pharmacy information system via secure site. This allows a pharmacist to work from an office or home and at any time day or night to support and accelerate mediation review for a hospital. A comprehensive research study was conducted to validate the value and hypothesis of ePharmacy and the research outcome has been published by the National Association of Hospital Pharmacists. The results were compelling in the area of staff satisfaction, medication error reduction, and cost savings/avoidance. All Via Christi hospitals are supported by epharmacy as well as six hospitals not affiliated with Via Christi. In addition, Via Christi pharmacy leaders have worked closely with Kansas Board of Pharmacy to develop hospital telepharmacy regulations that will allow remote dispensing of medication. While several other states such as Texas and North Dakota have telepharmacy regulations for medication dispensing, the Kansas regulations are comprehensive to ensure quality and patient safety while optimizing the skills of hospital trained pharmacists. Mark Gagnon, Via Christi ePharmacy Director, will provide a brief overview of Via Christi ePharmacy.

Each of these initiatives continue to transform the way Via Christi delivers care today and the way we view the future of health care. We have recently implemented an innovative Medical Home and Care Coordination model for Medicare patients that incorporate many of the program features outlined above. As we look to transform whole system of care into accountable care-like models, the tele and virtual care vehicles will be a vital part of the delivery and will enable improved access, patient safety/outcome, and efficiency.

House Vision 2020
2-21, 2011
Attachment 3

Via Christi HEALTH

ePharmacy Overview

House Vision 2020 Committee

February 21, 2011

Background

National Shortage

- It is projected by 2020 that the supply of pharmacists will fall short by 157,000 (Pharmacy Manpower Project)

Kansas

- 59 counties designated as medically underserved areas
- 31 counties have 1 pharmacist/pharmacy
- 6 counties have 0 pharmacist/pharmacy

Every year in the United States 1.5 million people have adverse events caused by medication mistakes costing hospitals about $3.5 billion in additional treatment expenses.

Goal of VCH ePharmacy

To **increase access** to a hospital pharmacist in order to **improve patient safety** through enabling technology and improve efficiencies in operations.

Via Christi HEALTH

Why ePharmacy at VCH?

Improve patient outcomes

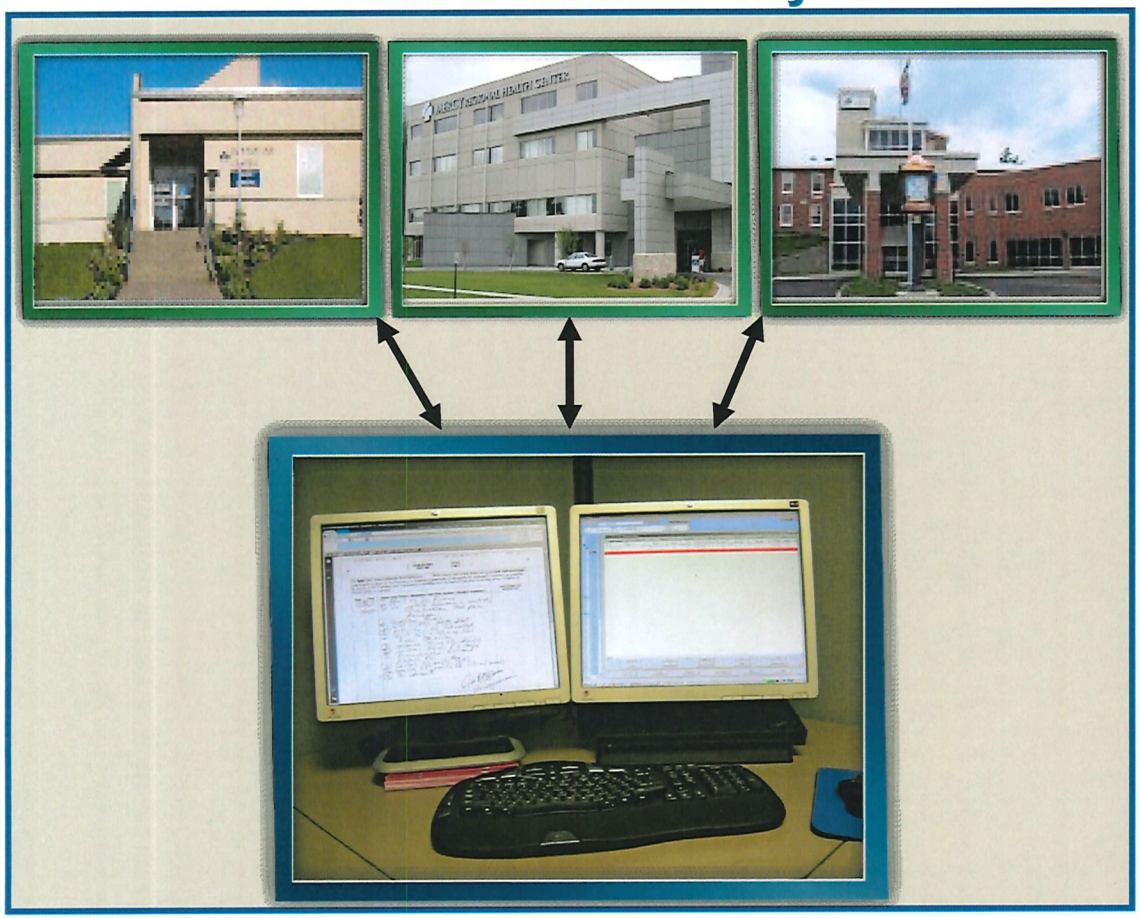
Improve efficient use of hospital pharmacists in light of shortages

Alleviate pharmacy vacancies

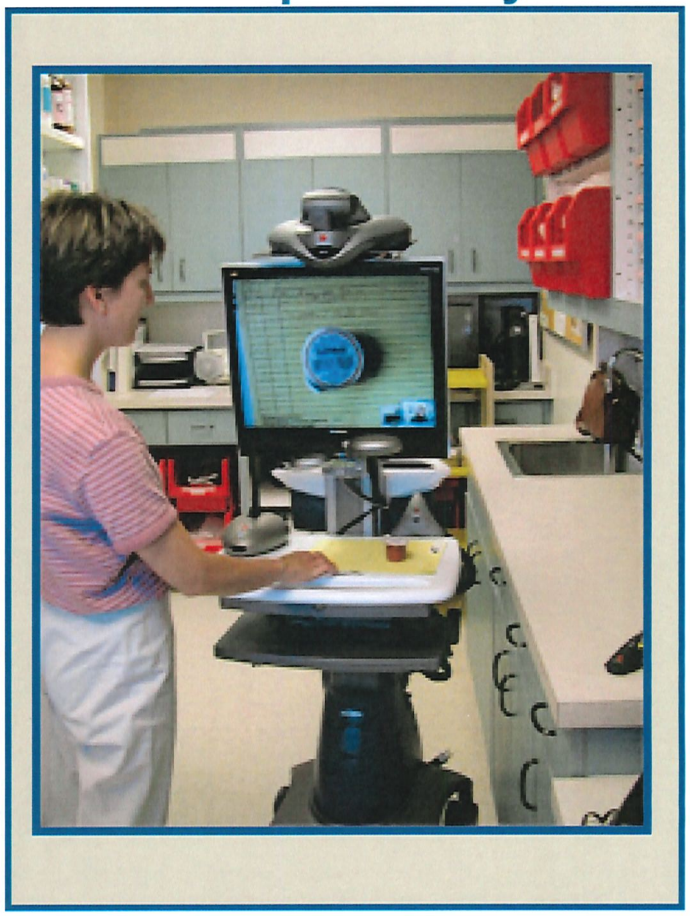
Create a service to support pharmacy needs in rural hospitals & communities

Two Components Transforming Pharmacy Service

Remote Order Entry



Telepharmacy



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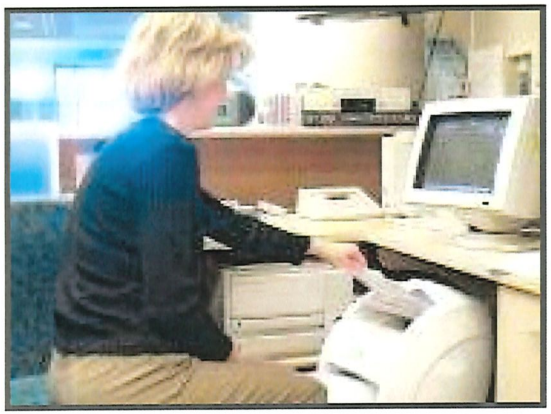
Remote Order Entry

Via Christi HEALTH

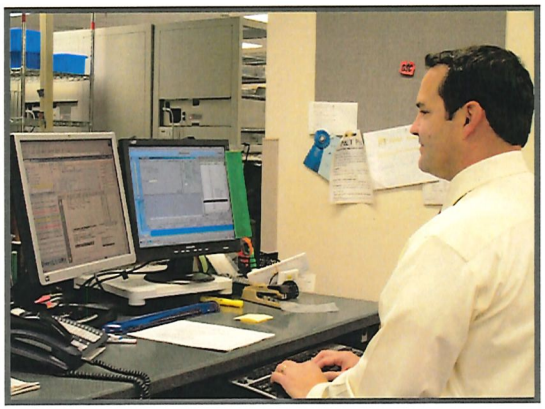
Component 1: Remote Order Entry

Via Christi HEALTH

Remote Order Entry: How It Works



Subscribing hospital medication orders are sent to an ePharmacy pharmacist at a remote location via scanning or efax technology.



The remote hospital pharmacist reviews the medication orders and connects with clinicians onsite, as needed, to clarify order information.

The order is then entered and verified in the hospital's pharmacy information system (PIS). Hospitals with no PIS will receive verification electronically.

Medication is dispensed via automatic dispensing machine* to be administered to the patient at the subscribing hospital.

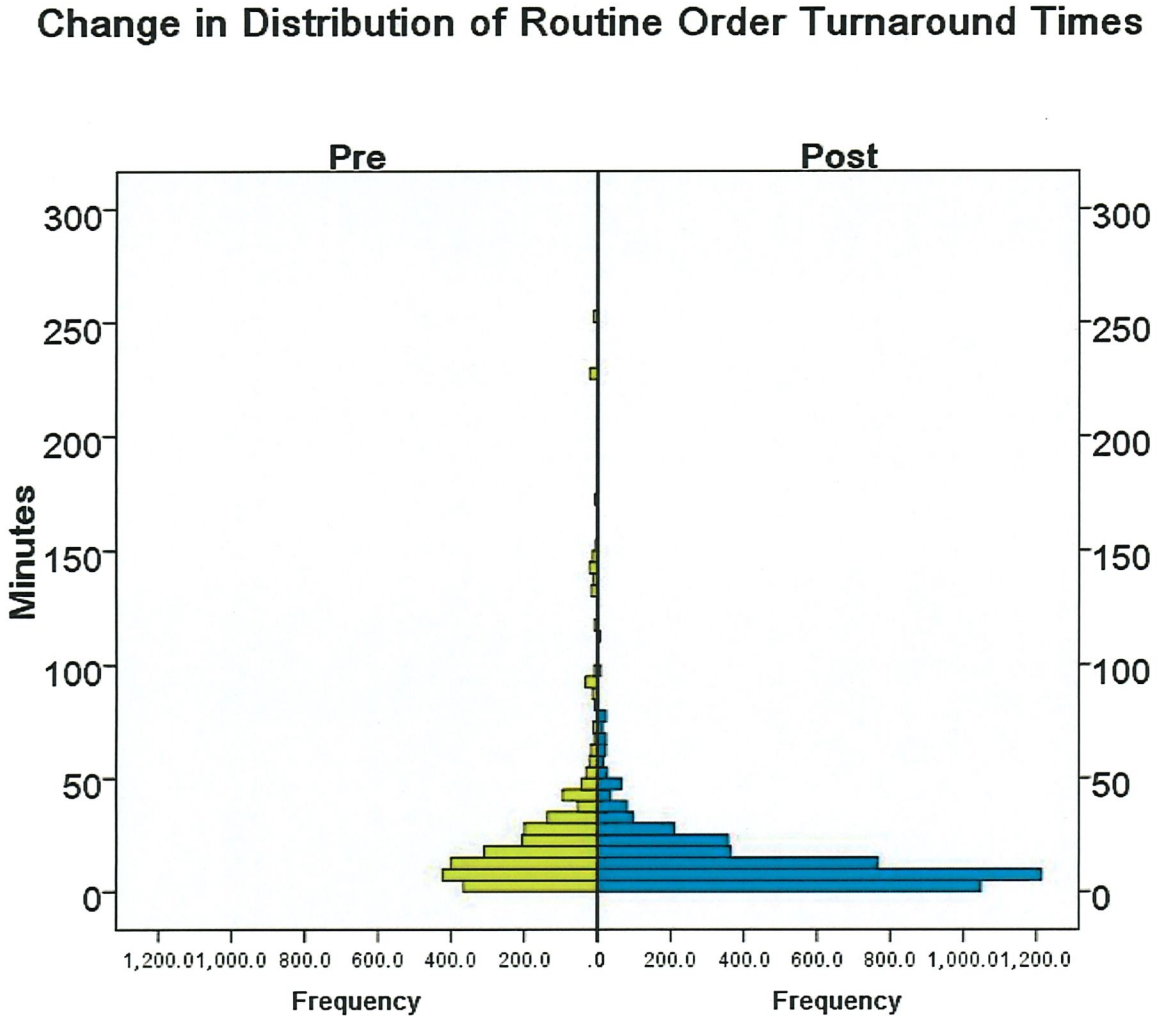
* *medication dispensing process may vary based on the available technology at the receiving hospital*

Research Study Purpose

To determine the impact of ePharmacy services on:

- staffing and workload
- order processing improvements
- drug therapy interventions (improvements)
- medication cost-savings

Pharmacy Turnaround Time Histogram



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Clinical Intervention Cost-avoidance Savings

Total savings $21,772 per week

Extrapolated annualized savings $1,132,144

ePharmacy Staffing Model

Unique features:

- Provide coverage for multiple hospitals with multiple pharmacy information systems
- All training is done remotely
- Pharmacists work from home or office

Telepharmacy

Via Christi HEALTH

Video Verification
How it works

Medication order and the patients MAR if needed are placed under the documentation camera for the pharmacist to review

Correct medication is placed under the camera for the pharmacist to verify with the order.

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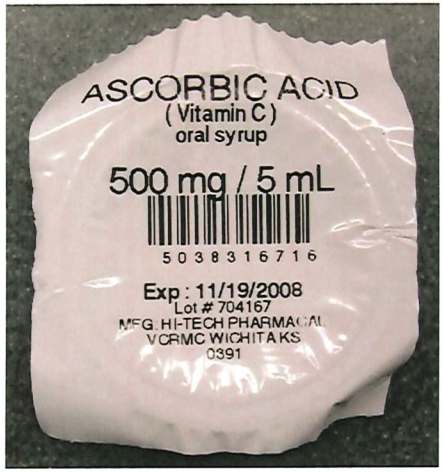
3-15

Video Verification
How it works



Utilize the telepharmacy technology to:

- Verify automated dispensing device refills
- Check IV preparations or unit dose medication
- Consult with patients, nurses and physicians

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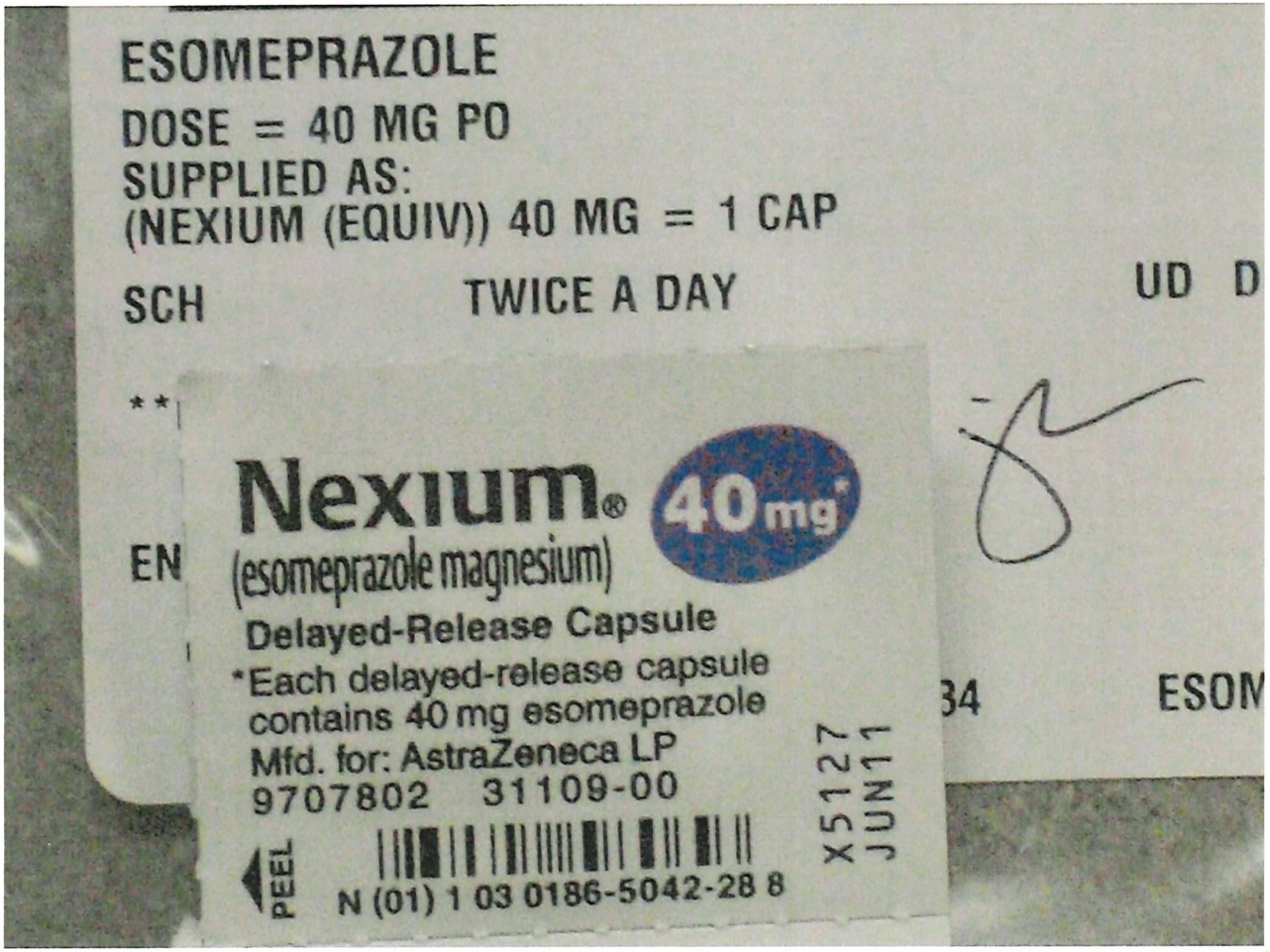
Video Verification



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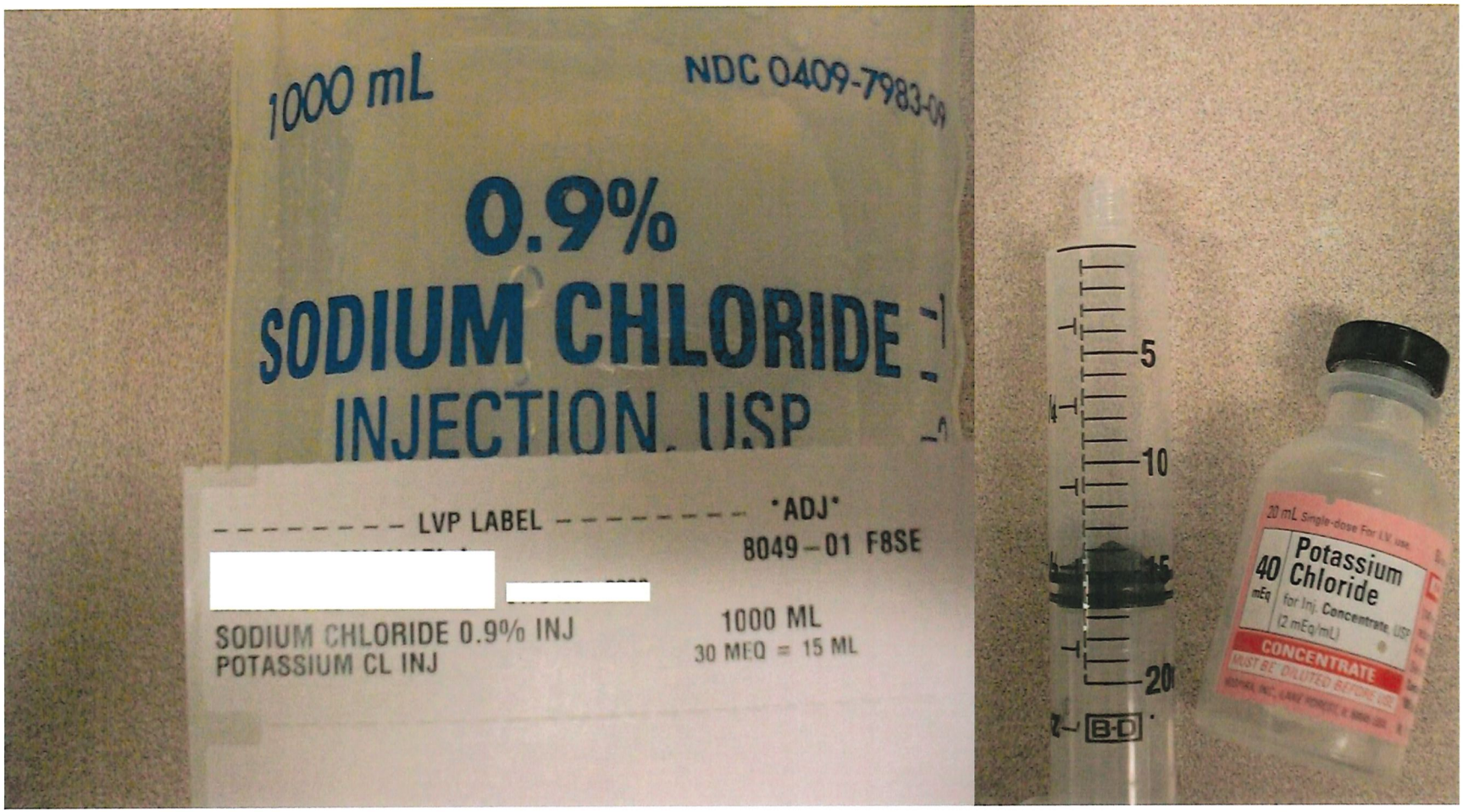
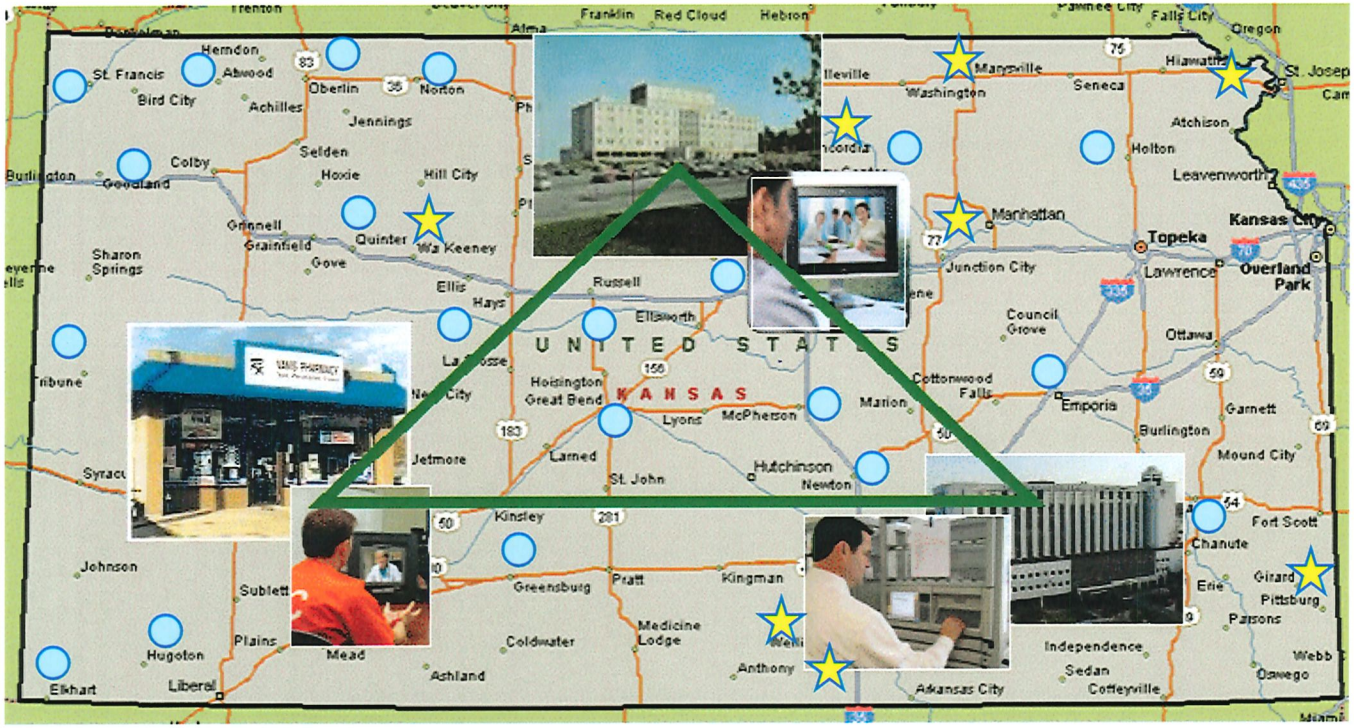
Video Verification



Via Christi HEALTH

3-18

Future Development
Local Pharmacy Collaboration



- Contracted Hospitals in the area
- Presentations made to hospital in the area

Telepharmacy may improve medication coordination with discharge and first-dose needs from hospital to home and community.

Via Christi HEALTH

CASE STUDY

Impact of telepharmacy in a multihospital health system

JAMES C. GARRELTS, MARK GAGNON, CHARLES EISENBERG, JANELL MOERER, AND JOE CARRITHERS

Purpose. The impact of telepharmacy in a multihospital health system was evaluated.

Summary. Telepharmacy services were implemented at five hospitals within a Catholic, nonprofit, integrated delivery network health system. Telepharmacy services were provided by seven pharmacists employed by the health system. Using a virtual private network or terminal server, pharmacists directly accessed hospital servers and information systems to conduct their work. Telephone calls were automatically routed to the telepharmacist so that handling of nursing and other calls would be transparent to staff. Hours of telepharmacy service were 5 p.m. to 2 a.m. Monday through Friday evenings at four of the hospitals and 8 p.m. to 10 p.m. at the rural hospital. Order-processing time for routine orders was reduced from 26.8 to 14 minutes ($p < 0.0001$), while stat order processing was shortened from 11.6 to 8.8 minutes ($p = 0.007$). For routine orders, turnaround times greater than 60 minutes became almost nonexistent after telepharmacy services were implemented. The number of clinical interventions documented increased by 42%, from 619 to 881, equivalent to a net annualized saving of $1,132,144. A significant improvement in nurses' global satisfaction with pharmacist availability for unit consultations was reported (3.0 versus 4.0 on a 5.0 Likert scale; $p = 0.028$).

Conclusion. The implementation of telepharmacy services in a multihospital health system expanded hours of service, improved the speed of processing of physician medication orders, and increased clinical pharmacy services and cost avoidance. Surveys of health care staff found that telepharmacy services were well received.

Index terms: Clinical pharmacy; Computers; Economics; Health professions; Hospitals; Hours; Interventions; Medication orders; Pharmaceutical services; Pharmacists, hospital; Telepharmacy

Am J Health-Syst Pharm. 2010; 67:1456-62

A national shortage of pharmacists is widely recognized, with a 5.9% vacancy rate in health-system pharmacies.[1] Most experts predict that the shortage of pharmacists and other health care professionals will become more acute as the baby-boom generation reaches retirement age. In 2008, inpatient pharmacy services in hospitals were provided for a mean of 106.1 hours per week.[1] This number was 86.1 hours for hospitals with 50–99 staffed beds and only 57.4 hours per week for those with fewer than 50 beds. Only 1.1% of hospitals with fewer than 50 staffed beds in 2008 provided 24-hour inpatient pharmacy services.

The impact of the pharmacist shortage is particularly severe in rural areas. In rural states, some counties do not have a pharmacist or pharmacy, and many counties have only one pharmacist or pharmacy. The severe shortage of pharmacists in rural areas has led some states, such as Alaska and North Dakota, to create a coalition to leverage available resources to help provide services for rural and remote areas of their states.[2,3] Telepharmacy, defined as the "dispensing of medication and information and the provision of pharmaceutical care to patients from a distance," has been used to provide services in such states.[4] We implemented and evaluated a telepharmacy system in selected institutions in our health system.

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Problem and background

Via Christi Health is a Catholic, nonprofit, integrated delivery network in Kansas. It includes hospitals of varying sizes and types, located in both urban and rural areas. The smallest hospital provides rehabilitation services to approximately 35 patients, while the largest hospital is a tertiary care facility serving approximately 350 patients. Three hospitals are community facilities serving 100–250 patients each. These hospitals use a cartless model of drug distribution with automated medication storage cabinets. Bar-code-assisted medication administration (BCMA) is implemented in all of the system's hospitals studied for this article. We are in the process of replacing a self-developed computerized prescriber-order-entry system with a commercial product that is integrated with our other hospital information systems. While we are able to provide onsite pharmacy services 24 hours a day at our two largest hospitals, staffing allows only partial-day onsite coverage at other facilities. Provision of pharmacy services for only part of the day is not optimal and can result in safety, efficacy, and cost challenges. For example, BCMA provides the greatest safety when there is 24-hour pharmacist order review and profiling, which allow the nurse to scan the medication bar code against the pharmacist-approved medication order. Also, regulatory agencies such as the Joint Commission have restrictions on nurse access to a closed pharmacy due to the risk of medication errors and other concerns. Therefore, even small hospitals are actively exploring ways to expand pharmacy services. In addition to expanding hours of service in our small rural hospitals, we were interested in finding ways to increase the level of clinical services provided in both large and small hospitals.

Analysis and resolution

The largest hospital involved in the telepharmacy project has 410 beds and serves all types of complex and critical patients (e.g., trauma, burn, oncology, adult and pediatric intensive care, cardiac, medical, surgical). The smallest hospital in the project is a rehabilitation facility that typically runs a patient census of around 40 patients. A total of five separate hospitals, in a range of types and sizes, were included in this evaluation.

Telepharmacy services were provided by seven pharmacists employed by the health system and overseen by the program director. We defined telepharmacy as the review and profiling of physician-ordered medications by a pharmacist from a remote site (in this case, from the pharmacist's home). These pharmacists were provided with a computer system and hospital telephone access; each worked from a home office using a home Internet cable connection. Using a virtual private network or terminal server, the pharmacists directly accessed hospital servers and information systems to conduct their work. The Siemens pharmacy information system (Malvern, PA) was used at four of the hospitals, with Meditech (Medical Information Technology, Inc., Westwood, MA) used at the rural hospital. Written physician orders were digitally scanned and processed using an electronic medication-order-management system. Telephone calls were automatically routed to the telepharmacist so that the handling of nursing and other calls would be "transparent" to staff. Hours of telepharmacy service were 5 p.m. to 2 a.m. Monday through Friday at four of the hospitals and 8 p.m. to 10 p.m. at the rural hospital. Outside of these hours, services were provided by one or no pharmacist, depending on the size of the hospital.

A great deal of planning occurred before we implemented our telepharmacy program. A full-day "decision accelerator" multidisciplinary planning meeting was held, followed by a series of weekly conference calls involving the health system's directors of pharmacy. These planning sessions allowed us to establish policies, expectations, and standard operating procedures. One of the challenges was to establish secure access to hospital information systems for telepharmacists, enabling them to work from home, which our information technology department was able to overcome. Another challenge was more specific to the telepharmacists themselves: to become proficient with two different pharmacy information systems and to learn hospital-specific policies and practices. Hiring telepharmacists from within our health system largely obviated this concern. At the four urban hospitals, telepharmacy expanded the hours of pharmacy service by 45 hours per week. Most of these hours were covered by existing staff, who were offered the opportunity to work from home and to be paid for doing so. For 25 of these hours, the telepharmacist satisfied enough order-entry duties to allow us to reassign an onsite pharmacist to our anticoagulation service and to other clinical duties, supporting our ability to meet the Joint Commission's National Patient Safety Goal 3E for improving anticoagulation safety. The other 20 hours per week of coverage were provided from 10 p.m. until 2 a.m. to assist with third-shift pharmacy staffing, where the workload for the one onsite pharmacist covering our largest hospital had become too demanding to allow us to meet our service goals. At the small rural hospital (99 staffed beds), telepharmacy expanded the hours of pharmacy service by 10 hours per week. This decreased the overnight medication orders that the morning pharmacists needed to review. As a result, the rural hospital was able to implement a pharmacist-led medication reconciliation process on its largest nursing unit, the medical nursing unit.

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Program evaluation. We conducted a study to evaluate the impact of the new telepharmacy program on our health system. The study was conducted using a prospective preintervention and postintervention study design. The lengths of the preintervention and postintervention study periods were equivalent and were determined by sample-size calculations. To ensure consistency, we needed to collect data for at least a week during each of the study periods. Based on the amount of orders processed by the pharmacies during a week (approximately 40,000 orders), any clinically relevant change in turnaround time was determined to be important. Ninety-five nurse satisfaction scores with a least difference of interest (LDI) of 0.5 of the standard deviation, with a 0.15 increase in the LDI to correct for the nonparametric nature of the data, were required for both the before and after surveys. The study protocol was submitted to the local institutional review board for approval. The study was conducted at selected hospitals within the Via Christi Health. The objectives of the study were to evaluate the impact of telepharmacy services on staffing and workload, clinical quality and patient safety, and costs and cost savings or cost avoidance.

For the staffing and workload evaluation, we determined (1) total number of hours per week of pharmacist coverage, (2) specific times of the day and week of pharmacist coverage, (3) total hours per week of onsite pharmacist time redeployed from medication order entry to other clinical service activities, (4) number of medication orders profiled, (5) turnaround time for medication order entry, and (6) level of satisfaction among pharmacists and nurses with telepharmacy services.

For the clinical quality and safety evaluation, we determined (1) total number of pharmacist-initiated therapeutic interventions, (2) total number of therapeutic interventions, separated by category, and (3) number of therapeutic interventions likely to have prevented a medication error or adverse drug event (ADE).

For the cost evaluation, we determined the average salary cost per hour for staffing the telepharmacy service and cost savings or cost avoidance resulting from pharmacist-documented clinical interventions. We used the dollar amounts for each clinical intervention category from the ACTION O-I benchmarking system (Thomson Reuters, Chicago, IL). Each time a pharmacist identified a drug-related problem and a resultant change occurred, the pharmacist documented the intervention in the appropriate category. The number of interventions and resultant cost impact were tabulated for each study period.

Whenever possible, study data were collected using electronic hospital systems (e.g., pharmacy information system, electronic medication-order-management system). Staff surveys (appendix) were administered electronically and by hard copy. Continuous data were transformed to achieve normality, if necessary, and then evaluated using appropriate statistical tests. Ordinal data were tested using nonparametric tests.

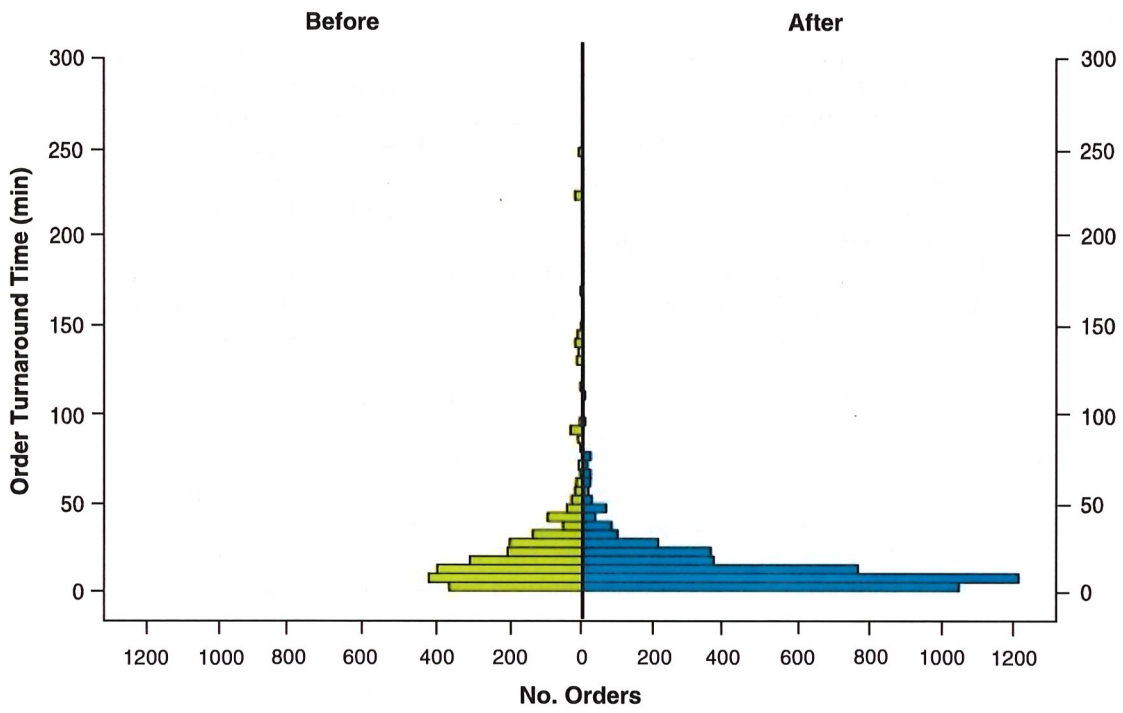
SPSS, version 16, was used to conduct all statistical testing and to generate graphs. The a priori level of significance was 0.05.

Evaluation findings. Ongoing tracking revealed that the telepharmacist profiled around 19% of all orders during his or her hours of duty. This translated to an average of 42 orders per hour. The mean order-processing time for routine orders was reduced from 26.8 minutes (95% confidence interval [CI], 25.4–28.3 minutes) to 14 minutes (95% CI, 13.6–14.5 minutes) ($p < 0.0001$), while stat order processing was shortened from 11.6 minutes (95% CI, 10.2–13.1 minutes) to 8.8 minutes (95% CI, 7.6–10.0 minutes) ($p = 0.007$) (Figure 1). For routine orders, turnaround times greater than 60 minutes became almost nonexistent in the postimplementation study period, and there was a shift toward very short turnaround times.

Pharmacist-initiated clinical interventions were recorded and examined over a one-week period before telepharmacy implementation and then again for one week after initiation of the service. Clinical interventions documented during the measurement period increased by 42%, from 619 to 881. As shown in Table 1, the categories with the largest increases in clinical interventions included chart review (no dollar value), clarification of the medication order (no dollar value), dose adjustment by pharmacy, medication teaching and discharge education, and warfarin follow-up. As another measure of quality, we surveyed nurses and pharmacists to assess their perception of the effect of telepharmacy on overall pharmacy services provided. A significant improvement in nurses' global satisfaction with pharmacist availability for unit consultations occurred (3.0 versus 4.0 on a 5.0-point Likert scale, $p = 0.028$). While pharmacists expressed an improvement in global job satisfaction (3.0 versus 3.5), the difference was not statistically significant.

Because pharmacists' salaries are moderately high, we were interested in determining whether the cost could be partially or fully offset by the savings associated with increased clinical interventions. At an estimated salary of $55 per hour and 30 hours of work weekly, the cost of the service would be $1,650 per week. The cost avoidance associated with the increased clinical interventions documented (881 versus 619) was $23,422 ($86,064 versus $62,642) (Table 1). Therefore, the telepharmacy service generated a saving of $21,772 for one week. If this saving were extrapolated to one year, the annualized saving would be $1,132,144.

Figure 1. Distribution of turnaround times for routine orders before and after implementation of telepharmacy services.



Discussion

Pharmacists have unique knowledge and experience that qualify them to help minimize the risk of medication errors and ADEs and to optimize medication-related outcomes in hospitalized patients. Pharmacists create these improvements by instituting medication management systems and controls that guide other health care personnel to use medications safely and optimally. In many instances, the pharmacist improves patient outcomes simply by double-checking the physician's medication order, the medication to be administered, or the treatment plan. The Joint Commission has recognized the value of the pharmacist in providing a safe and effective medication management system and requires pharmacists to prospectively review each medication order before the medication is administered to the patient.

In a landmark series of studies evaluating thousands of U.S. hospitals and outcomes in several hundred thousand patients, Bond and coworkers[5-9] demonstrated a correlation between the provision of selected clinical pharmacy services and improvements in patient care and financial outcomes. Increases in pharmacist staffing and the provision of clinical services were correlated with reductions in mortality, medication errors, length of hospital stay, drug costs, and the total cost of care.

Other investigators have demonstrated the impact and value of expanded pharmacist involvement in the medication-use system. Leape and colleagues[10] showed that clinical pharmacist participation during patient care rounds in the intensive care unit lowered the rate of preventable ADEs by 66%. Kucukarslan et al.[11] extended this observation by demonstrating a 78% reduction in ADEs on general medicine units when a clinical pharmacist joined the physician's rounding team. Clinical pharmacist participation during patient care rounds has also been shown to reduce medication errors by 51%.[12] The percentage of patients in the study without a medication error during their hospitalization increased from 22.9% in the control group to 40% in the clinical pharmacy group. Similarly, a pharmacist working on the cardiovascular wards prevented 24 medication errors per 100 patient admissions.[13]

In addition to reducing ADEs and medication errors, clinical pharmacy services have been shown to produce substantial cost savings and cost avoidance.[14-24] Formal reviews of the literature have shown the cost:benefit ratio for clinical pharmacy services to range from 4.68:1 to 16.7:1.[14,15] Clinical pharmacists can reduce drug expenses in a variety of ways, such as selecting a less expensive but equally effective agent, switching from the i.v. to the oral route of administration when appropriate, and tailoring

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Table 1.
Clinical Pharmacy Interventions During One-Week Periods Before and After Implementation of Telepharmacy Services[a]

Intervention	Before Telepharmacy		After Telepharmacy	
	No. Interventions	Associated Cost Avoidance ($)	No. Interventions	Associated Cost Avoidance ($)
Chart review	59	0	98	0
Chemotherapy order review	39	4,290	30	3,300
Clarify order	318	0	378	0
Dosage adjustment	4	448	116	12,992
Change from i.v. to oral route	24	600	20	500
Teaching about medications	20	4,160	59	12,272
TPN consultation	13	1,560	17	2,040
TPN follow-up	53	1,590	41	1,230
Warfarin dosing	17	12,563	15	11,085
Warfarin follow-up	18	3,330	57	10,545
Medication history	53	34,026	50	32,100
Medication reconciliation	1	75	0	
Total	619	62,642	881	86,064

[a]Thomson Reuters, ACTION O-I pharmacy clinical intervention documentation, 2009. TPN = total parenteral nutrition.

a reduced dose to a patient's needs based on renal function. Finally, reductions in the cost of hospitalization may occur through prevention of medication errors or ADEs. These latter types of cost reductions typically dwarf other types of cost reductions in the amount saved and range from $2000 to $6000 per incident prevented.[25-27]

We used telepharmacy to expand the scope and availability of pharmacy services in hospitals within our health system. While we did not specifically explore the impact of these services on the prevention of medication errors and ADEs, it is reasonable to expect that such an impact did occur based on previous reports in the literature. Similar to the reports of other investigators, we found that our pharmacists were able to produce and document a higher rate of clinical pharmacy interventions after the implementation of the telepharmacy program. The financial and patient care outcomes made possible by implementing telepharmacy services were likely substantial.

A variety of models have been explored and developed for using telepharmacy to meet the needs of patients and health care entities. Most of the early work done with telepharmacy occurred in rural states and focused on the community pharmacy setting.[2,3,28-30] However, a few reports have described the implementation of telepharmacy services to assist rural critical access hospitals[31-33] or a specific area of a larger hospital.[34,35] Critical access hospitals have generally reported implementation of telepharmacy services to expand hours of coverage and to reduce medication errors related to nurses accessing a closed pharmacy. The primary challenges to implementing telepharmacy in critical access hospitals are purchase of information technology equipment and finding pharmacist resources to provide the service. In some instances, federal grants have been used to purchase information technology equipment. In the absence of a locally available pharmacist, critical access hospitals have sometimes contracted with a larger regional hospital for service provision. At larger hospitals, telepharmacy services have been implemented to improve patient safety, either by increasing hours of pharmacist coverage or by expanding the scope of services provided to include additional clinical expertise.

Our integrated delivery network successfully implemented telepharmacy services and expanded pharmacy services for a broad range of hospital sizes and types. Similar to other reports, we were interested in using telepharmacy to improve patient safety and expand clinical pharmacy services. One of the challenges we faced was a lack of standardization in pharmacy information and order transmission systems, as well as policies and practices. Our telepharmacists had to adjust to these differences, requiring us to create a structured training program. We recognize that our health system's entities must work toward standardization in order to optimize our services. However, we have found that our telepharmacy services have been relatively seamless from the perspective of frontline practitioners. In fact, nursing satisfaction increased significantly after the implementation of telepharmacy services. We also documented significant improvements in

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pharmacist processing of medication orders and in the provision of clinical pharmacy services. Both of these activities are widely accepted as making important contributions to improving patient safety and health-related outcomes. We continue to use telepharmacy services in our hospitals and foresee continued expansion in the future, so the model we have implemented seems sustainable. In addition, some small hospitals that are not a part of our health system have contracted with us to provide telepharmacy services.

There are several important limitations to our study. First, using a preintervention and postintervention study design does not mitigate against the introduction of other factors that might have contributed to the results we obtained. However, our data collection periods for the preintervention and postintervention periods were close to each other, and we are not aware of any other significant system changes that might have affected our results. Since we were unable to blind the study, we cannot rule out unintended bias in some areas of data collection. For instance, pharmacists could have altered their documentation of clinical pharmacy interventions or their speed of medication order profiling. However, we did not inform staff when data collection would be occurring, and such data were collected from computerized documentation systems. Because data collection for this study occurred over a relatively short time period, the impact and sustainability of telepharmacy in our health system over an extended period of time are yet to be determined. However, we have yet to see any substantial problems, and interest in this service by hospitals outside our health system has been strong.

Conclusion

The implementation of telepharmacy services in a multihospital health system expanded hours of service, improved the speed of processing of physician medication orders, and increased clinical pharmacy services and cost avoidance. Surveys of health care staff found that telepharmacy services were well received.

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Appendix—Health professional survey questions

Nursing survey

1. During which time periods are physician orders most frequently written?
2. Does the presence or absence of a pharmacist ever affect when you enter the doctor's orders into the pharmacy system?
3. What would be the effect of having a pharmacist available after normal pharmacy hours?
4. What would be the effect for your unit of having a pharmacist available on the floor to review orders?
5. How do you feel about administering medications before/without a pharmacist's review?
6. What would be the effect for your unit of having a pharmacist present at patient admissions or discharges for medication consults?
7. Do you feel the pharmacy does a good job providing patient medication care?
8. How satisfied are you with the present pharmacy service? If dissatisfied, why?

Pharmacist survey

1. What level of need is there for increased pharmacist coverage at your institution during specific periods of time? Please specify the time periods.
2. What would be the effect of having a pharmacist available after normal pharmacy hours?
3. What would be the effect on hospital service delivery of having a pharmacist available on the floor to review orders?
4. How satisfied are you with the present pharmacy service?

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February 17, 2011

Dr. Andy Thompkins, CEO
Kansas Board of Regents
Curtis State Office Building
Topeka, KS 66612

Dear Dr. Thompkins:

The Vision 2020 Committee seldom considers specific bills, but instead focuses on longer range issues, state agency coordination, and opportunities for Kansas and Kansans to better meet evolving challenges and opportunities.

To those ends, the Committee has explored issues related to higher education funding sources, State government's legal and political responsibilities, and opportunities to further strengthen the educational and employment opportunities in Kansas.

Committee members appreciate the responses provided to questions posed after extensive hearings in 2010 and your willingness to engage with us during your appearances before the Committee this Session. We remain convinced that Board of Regents, Institutional administrators and faculty, higher education students, and state legislators must collectively consider how best to provide educational opportunities in a globally competitive environment and in fiscally challenging times. To that end, below are some questions that we pose as a means of better coordinating higher education stakeholders' and legislators' interests and knowledge. We recognize that some of these questions are very challenging and touch on controversial subjects, but we believe that the future of higher education funding in Kansas is significantly impacted by concerns about costs and educational success. Hopefully research and discussions within the higher education community during the summer and fall of 2011 will result in information that legislators can use to better serve our institutions of higher education and the students we both serve.

Prior to January 15, 2012, please develop and report to the Vision 2020 Committee suggestions and answers to the following questions and topics:

To remove some of the contentiousness and ambiguity related to higher education funding, examine the feasibility, legality, and desirability of increasing the Education Building Fund mill levy to support infrastructure maintenance and installation of educational and research technological equipment for universities, community colleges, and technical colleges;

To better convey to legislators and the public what is funded by the state, identify categories most appropriate and politically realistic for bloc grant state funding at universities, community colleges, and technical colleges (e.g., infrastructure, salaries, student aid);

Identify appropriate and politically realistic opportunities to fund higher education from sources other than State General Funds that will not damage access to and the quality of educational opportunities. Please identify the sources and what specific aspects of higher education could be thusly funded;

Student financial aid is important to institutions, students, and state legislators. However, the Legislature does not have a firm idea of what needs exist and what is an appropriate funding mechanism. Develop an appropriate formula and justification for determining state financial assistance funding to students at universities, community colleges, technical colleges, private colleges;

In support of the State's economic development initiatives, identify appropriate and politically acceptable ways by which the State can more effectively support innovative research efforts at Regents' institutions and the commercialization of the products of such research, especially in terms of making smaller discoveries more available for commercial development by Kansans;

Determine if measures of student knowledge and critical thinking capabilities (e.g., the Collegiate Learning Assessment) are being used by all Kansas public universities and if such studies are used how well our students compare to students at other colleges and universities. If such studies are not being used, please explain why such accountability metrics are not deemed important;

As a cost-savings option for students, determine whether a 3-year degree option (e.g., as used at Amherst, American University, and other institutions) or the 3 + 1 proposal (e.g., as advanced by the University of Virginia) are appropriate for Kansas' Regents' institutions, especially in light of the number of Advanced Placement course credits entering Freshmen have and the number of credits college students transfer from on-line classes taken. If appropriate, what steps will be taken to promote or implement such programs if they are not already promoted. If such program options are inappropriate in Kansas, please explain why that is so;

Determine whether Kansas' community colleges use the Virginia Tech "Math Emporium" approach that focuses on student deficiencies and needs (e.g., Montgomery College) or combining remediation with college-level study (e.g., the Accelerated Learning Program at the Community College of Baltimore County). If our community colleges utilize the above or similar programs, please report the success of such programs in student learning and retention. If our community colleges do not use such programs, please describe the existing programs and explain why they are more successful than alternative programs; and

Please suggest other funding topics and policy recommendations as you may collectively deem appropriate for the Legislature to consider.

On behalf of the Committee members, thank you for considering how in an age of constrained finances innovative approaches to financing higher education opportunities in a sustainable manner can be accomplished by the Board of Regents, higher education institutions, and state legislators developing a mutually agreed upon paradigm.

Rep. Vern Swanson, Vice Chair Rep. Tom Sloan, Chairman Rep. Gail Finney, Ranking

February 17, 2011

Dave Larson
Don Heiman
State Capitol
Topeka, KS 66612

Gentlemen:

The Vision 2020 Committee seldom considers specific bills, but focuses instead on longer range issues, state agency coordination, and opportunities for Kansas and Kansans to better meet evolving challenges and opportunities.

To those objectives, the Committee has explored the feasibility of Kansas developing enhanced computing capabilities to aid Regents' institutions' researchers, private sector researchers in Kansas, and as a business development and recruitment "tool" for the Department of Commerce. Evidence from other states demonstrates that universities with "super computer" capabilities (e.g., Louisiana State University) have attracted very significantly increased NSF, NIH, DOE, and other grant funds; successfully attracted new faculty and research teams; and states supporting "super computers" market computing capabilities to private sector interests (e.g., New Mexico).

Prior to January 10, 2012, please develop and report to the Vision 2020 Committee the results of a working group comprised of:

Board of Regents and Regents Institution members
Kansas Bio-Science Authority
Governor's Economic Development Council
Department of Commerce

Such other agencies and private sector organizations and individuals as may be appropriate, to address such topics as:

Desirability, feasibility, and probable benefits of the state supporting development and/or upgrade of existing capabilities such that the state may market a top 50 in the world computing capability;

If the state were to pursue such a computer capability, determine the feasibility of such capability being scalable such that annual upgrades can be made to maintain a global top 50 status;

Determine the probable value to Regents' institution researchers and recruitment efforts, and the prospects for attracting in- and out-of-state private sector interests contracting to use such computing capacity;

If the prospective value to the state of establishing such computer capabilities is positive, determine whether upgrading one or more existing Regents' institutions' computers are scalable, whether one or more existing computer systems can be linked to address capacity needs/opportunities, or whether a new computer would be more beneficial and cost-effective;

If the prospective value to the state of establishing such computer capabilities is positive, determine whether a cloud infrastructure or a more traditional computer design would best meet long-term state interests; and,

Such other issues as the group may determine relevant to the state's long-range best interests.

On behalf of the Committee, we appreciate your forthcoming efforts to determine if and how increased computing capacity in Kansas may best serve our long-term interests and if warranted, how such increased capacity may most cost-effectively and expeditiously accomplished.

Rep. Vern Swanson, Vice Chairman Rep. Tom Sloan, Chairman Rep. Gail Finney, Ranking

The Washington Post

Eight ways to get higher education into shape

By Daniel deVise
Sunday, February 20, 2011; W12

It's not "broken," so you could argue that it doesn't need to be "fixed."

The fact is, America's higher education system is still widely regarded as the best in the world. And that reputation certainly fits the nation's top research universities and liberal arts colleges, those with swelling endowments and shrinking admission rates.

But this vaunted reputation -- which draws students from all over the globe -- also masks what can only be described as some major flaws: spiraling tuition and fees. Yawning "graduation gaps" between students of different racial and ethnic categories. And nagging questions about how much today's college students actually learn.

We take a look at eight big problems facing the academy and, aided by some of its greatest minds, offer up some big ideas to help solve them.

So, while it may not be broken, why not perfect it?

***

1. Measure student learning | 2. End merit aid | 3. Three-year degrees | 4. Core curriculum | 5. More homework | 6. Encourage completion | 7. Cap athletic subsidies | 8. Rethink remediation | Which idea is best? Vote now.

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1.Measure how much students learn at every college

A mere decade ago, few colleges had any objective means to measure how much their students learned between enrollment and graduation.

American higher education rested on its laurels, secure in its reputation as the best in the world, a credential based largely on the achievement of a few hundred national universities and selective liberal arts schools.

Slowly but surely, the accountability movement, along with rising concern that

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we're no longer the best, have breached the ivory tower.

The 2001 arrival of a federal mandate for student proficiency in K-12 education, No Child Left Behind, compelled serious discussion of standardized testing in American universities. A 2000 report by the National Center for Public Policy and Higher Education had graded every state "incomplete" for evidence of student learning. In 2006, a commission empaneled by the George W. Bush administration flirted with the idea of proposing a collegiate "No Child" law.

"We don't know whether our graduating students know more than the freshmen," said Richard Vedder, an Ohio University economist who participated in the 2006 report. "We don't know if they know more than they did 20 years ago."

Sensing a sea change, the higher education community responded with something approaching a national effort to measure student learning. In 2007, two organizations representing more than 500 public universities (and 70 percent of U.S. bachelor's degrees) launched a Voluntary System of Accountability. They encouraged member schools to choose among three standardized tests that offer comparable measurements of critical thinking. Other, smaller alliances followed.

More than 500 institutions have participated in the Collegiate Learning Assessment, the most popular of the new tests. The test and its competitors, the Collegiate Assessment of Academic Proficiency and the Proficiency Profile, generally attempt to measure the reasoning skills of students at a particular college, how they stack up against students at other schools, and what they have learned between freshman and senior years.

The other key product of the accountability movement is the National Survey of Student Engagement, a decade-old initiative that attempts to measure whether a college is a rich learning environment, including powerful new data on how much time students spend engaged in study. More than 600 colleges participate annually.

Proponents of the accountability movement envision a time when the assessments are so

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pervasive, and so public, that the annual college rankings by U.S. News & World Report, Forbes and their ilk include data on student learning -- something they measure now only indirectly, through such metrics as graduation rate and student-faculty ratio.

"We're forced to do the rankings using second-rate, third-rate measures," said Vedder, who oversees the Forbes rankings, "because there are no first-rate measures."

Student learning data might become a part of every college guidebook and find-a-college Web site.

Many college leaders remain staunchly opposed to standardized testing, arguing that colleges are more intellectually diverse than high schools, and that no standardized test can measure their product.

"I think standardized tests at the collegiate level are anti-intellectual," said Patricia McGuire, president of Trinity Washington University.

Some critics also complain that the tests' focus on rating the school rather than the individual gives students little incentive to score well.

There is also concern about publishing scores, a step that might lead some colleges to abandon testing or, worse, turn away disadvantaged students to raise their numbers.

"You introduce some perverse incentives when you start making the information public," said Alexander McCormick, director of the student-engagement survey.

Any federal effort to require standardized testing in colleges would launch a rhetorical battle for the ages. Reformers suggest an alternative: Accreditors, whose academic reviews are key to a school's survival, could require colleges to publish proof of student learning as a condition for accreditation.

"Instead of people saying, 'You can't do this,' now the conversation is about how you do this, and I think that's very positive," said Roger Benjamin, president of the Council for Aid to Education, which administers the Collegiate Learning Assessment.

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2.**End merit aid**

Few policy leaders would seriously propose eliminating financial aid based on academic merit, an essential variable in today's competitive college-admissions marketplace.

Yet, critics deride merit aid as affirmative action for the wealthy, a system that increases access for students who can afford college without it.

"There are colleges where the average price paid by rich kids is lower than the average price paid by poor kids, and the reason is merit aid," said Sandy Baum, an independent policy analyst.

Thirty years ago, merit aid was the rare scholarship to the extraordinary student, the vestige of an era when smart people might not go to college without a cash incentive.

Today, many upper-income families enter the college search with an expectation of merit aid. They shop for colleges as they would for cars, weighing offers from rival schools, haggling with admissions officers, effectively auctioning off a star student to the highest bidder.

Private colleges dispense merit aid at a rate of $2,060 per student, while public colleges spend $410 per student, according to College Board data

It's natural that families would shop around: The sticker price at top private colleges can exceed $50,000 a year in tuition and living expenses, beyond the reach of the middle class.

But merit dollars are spent, by and large, on students who would go to college, anyway. A m iddle-class student denied merit aid by a $50,000-a-year college might not be able to afford that college, but he or she can still afford college.

Merit aid favors the wealthy: Children from affluent families tend to have greater "merit," i n the form of higher grades and test scores.

Less-selective colleges leverage merit dollars to attract tuition-paying students and fill seats. More-selective schools offer merit aid to lure top students who raise the schools' academic standing. Winners of the bidding

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wars lose tuition money that might otherwise be spent on teaching or on students with need. Merit discounts inflate the tuition charged to those who pay full price.

"Every dollar that we spend on merit aid as opposed to need-based aid is wasted," said Douglas Bennett, president of Earlham College in Indiana.

A small group of elite, well-endowed colleges have resisted merit aid, awarding aid solely for need. Some schools promise to meet the full need of students with aid, so that no one -- in theory -- is priced out.

There are arguments for merit aid. Merit scholarships are popular among donors who want to reward hard work. Some merit-based programs steer students into high-demand fields.

But critics of merit aid say there is no compelling reason for colleges to court high-performing students save collegiate rankings, a pursuit scores of college presidents publicly disavow.

If college is becoming unaffordable, the reformers say, all the more reason to award aid dollars to those in need.

Jamie Merisotis, chief executive of the Lumina Foundation, suggests colleges be urged to incorporate "some form of need" into all financial aid awards.

Baum suggests the best way to curb merit aid would be to loosen federal antitrust rules that bar colleges from sharing price data. If colleges shared aid awards with their rivals, they could potentially end the merit-aid bidding wars.

3.Standardize the three-year bachelor's degree

Henry Dunster, Harvard's first president, altered the course of collegiate history in 1652 when his Harvard Corporation lengthened the time required for a bachelor's degree from three years to four.

Now there is a movement to shorten it back to three.

Several prominent colleges have launched

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three-year degrees in the past few years, promising students all the richness of a college education in shorter time and at lower cost.

The flagship University of Massachusetts Amherst became a high-profile exemplar of the trend this fall, offering three-year degrees in economics, music and sociology in a pilot program. It's tailored to students who have Advanced Placement credits and are willing to take summer school. The potential savings: at least $15,000 in tuition, fees and living expenses.

Other new programs are becoming almost too numerous to list: Hartwick College in New York. Chatham University in Pittsburgh. The University of North Carolina at Greensboro.

"Education should never be a one-size-fits-all enterprise," said Margaret Drugovich, president of Hartwick.

New University of Virginia President Teresa Sullivan has proposed a three-plus-one program, giving students a bachelor's degree in three years and a master's in four, at significant savings.

"The parents I've talked to like it a lot," Sullivan said.

American University will launch its first three-year degree this fall, in international service. At the University of the District of Columbia, President Allen Sessoms proposes what amounts to a two-year degree for some District high school students, who would effectively start college in their junior year. Rhode Island lawmakers in 2009 mandated a three-year option at the state's four-year colleges.

Powerful forces are driving the change. One is the rise of college-level coursework in high school: The AP program has tripled in size in little over a decade.

Another factor is the 2008 recession, which compelled colleges to find ways to lower their price. A third is the rise of for-profit colleges and online study, forces that have liberated students to take classes when and where they please.

The share of students who complete college

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in three years is already rising, from 1 percent in 1998 to 2.5 percent in 2006, a ccording to the most recent federal data.

But few colleges have recognized the three-year degree as an official goal or have done much to help students attain it.

"If you're running a school, it's in your interest to keep them there for four years," said Stephen Trachtenberg, president emeritus of George Washington University. "And five years is even better."

Critics say a three-year degree would disrupt the classic model of liberal education, leaving students too busy to reap the benefits of campus life. Even four or more years of college often fail to produce literate adults. Federal data from 2003 rated 31 percent of college graduates "proficient" in reading prose.

Some reformers say the goal should be to deliver an advanced degree in four or five years, rather than a bachelor's in three, for a select population of students capable of acceleration. A growing number of universities, including Georgetown, GW, Marymount, Howard and U-Va., already offer accelerated master's degrees.

"People are going to need to continue their education," Trachtenberg said, "whether they do a BA in four years or three years."

4.**Revive the core curriculum**

Generations of Americans went to college to learn a common core of human knowledge: Plato's "Republic." Darwin's "Origin of Species." "The Iliad" and "The Odyssey." The rise and fall of Greece and Rome. Enough Latin to read the school motto and enough Shakespeare to drop quotes at cocktail parties.

The core curriculum all but perished in the 1960s, under assault by several converging trends: a rising consumer mentality among students, the evolution of college professors from educators into researchers pursuing ever-narrower specialties, the expanding global knowledge base and a changing academic culture that looked beyond the teachings of dead white men.

Today, only a handful of prominent

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institutions -- including Boston and Columbia universities, the University of Chicago and quirky St. John's College -- attempt to teach students the fundaments of their intellectual heritage.

"The first two years, we want kids to follow our program. And we've spent decades working on this, fighting about it," said John Boyer, dean of the College at the University of Chicago.

To ask whether the core curriculum should be revived is really to ask why students go to college: Is it to learn essential knowledge, such as Shakespeare and Milton, or essential skills, such as how to think critically and engage with the world?

Advocates of the core curriculum say the academy has abdicated its responsibility to prioritize human knowledge. Defenders of the prevailing system say the academy's goal is to teach thought, not facts. Students are presumed to have surveyed their intellectual heritage in high school.

The prevailing model of "general education" requires students to take one or two courses each in several broad academic fields, such as cultural studies, quantitative reasoning and natural science. Course choices can number in the hundreds.

Students are free to pursue their own itinerary of essential knowledge. Many students satisfy "distribution requirements" with uninspired survey courses or with courses too esoteric or peripheral to rate as essential. At the University of Maryland, for example, students may satisfy their Social Sciences and History requirement with courses on the history of sexuality, advertising or sports.

"It's an educational program with neither design nor purpose," said Robert Zemsky, a higher education scholar at the University of Pennsylvania.

College presidents say they cannot get faculty committees to agree on what a core curriculum should include -- or, more precisely, what it should exclude. Academic departments have grown siloed and competitive; in curricular decisions, no one wants to be left out.

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There's broad agreement that the general education system is flawed, and some presidents are calling for stronger core requirements. The American Council of Trustees and Alumni in Washington has led the campaign; its 2010 report What Will They Learn? gives Harvard a D and Yale an F for failing to require such basic subjects as mathematics and U.S. history.

The core may be making a modest comeback. A growing number of colleges are building required courses and texts into new first-year experience programs, senior "capstone" projects, honors colleges and other school-within-a-school initiatives.

A core curriculum does not necessarily mean dead white men. The new first-year program at Trinity Washington University, a majority-black women's college, might ask students to read Toni Morrison or Alice Walker en masse, said Patricia McGuire, Trinity's president.

"Now, that doesn't mean we don't also read Shakespeare," she said.

5.**Bring back homework**

These days, the best years of our lives are also some of the easiest.

Research shows that the average time college students spend on homework has fallen by nearly half in 50 years, from about 25 hours a week in 1961 to 15 hours today. College used to match the pace and rigor of a full-time job; today, it looks more like a part-time job.

Students don't work as hard because they don't have to. The overall collegiate grade-point average has risen in the past half-c entury by half a point, from roughly 2.5, midway between a C and a B, to just over 3.0, a solid B.

Both trends hold true across public and private institutions of greater and lesser selectivity. Grade inflation became so pronounced that in 2004, Princeton leaders decreed that no more than 35 percent of undergraduate grades could be A's.

Some experts have suggested students are getting better grades because they are smarter, as evidenced by rising SAT averages a

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t selective schools. But researchers say the SAT cannot wholly explain the rise.

There's mounting evidence that less study means less learning. An influential new book, "Academically Adrift," uses data from the Collegiate Learning Assessment to suggest that 36 percent of students make no significant learning gains in college.

Students may spend less time studying because more of them hold real jobs. Another factor is technology: It is quicker to research and write a term paper with an Internet-connected laptop than with a typewriter and a stack of reference books. But most of the decrease in study time occurred in the 1960s and 1970s, before the personal computer age.

There is another theory. Over the decades, the quality of classroom teaching has counted ever less toward a professor's career trajectory, while the quantity and quality of research output have counted ever more.

Research "may be drawing faculty away from assigning work," said Alexander McCormick, whose National Survey of Student Engagement has yielded some of the best data on study time. "If I assign students a lot of papers, I have to grade them."

The rising consumer culture of college in the 1970s created new incentives for professors to go easy on students. Consider the modern course evaluation, a tool that consistently punishes -- with low ratings -- professors who assign lots of homework or give low grades.

Some researchers liken the current climate to a mutual nonaggression pact between faculty members and students. "Each one says, 'I won't ask too much of you if you don't ask too much of me,'" McCormick said.

The general rule in higher ed is that students ought to expend two hours of study for every hour of class time. Fifteen hours of weekly class time would spawn 30 hours of homework, or 45 weekly hours of total study time. Students approached those numbers in 1960. Today, the ratio is closer to 1:1.

Faculties could boost rigor simply by assigning more homework. Colleges also could promote "high-effort" practices across

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the curriculum, such as challenging freshman seminars, writing-intensive courses, undergraduate research assignments, service learning and long-term "capstone" projects. Research links these "best practices" to higher retention and stronger performance on learning assessments.

"The more students do these, the more they stay in school, and the better they do on measures of their actual learning outcomes," said Carol Geary Schneider, president of the Association of American Colleges and Universities.

6.**Tie public funds to finishing college**

In 2009, President Obama invoked Sputnik-era patriotic angst in announcing his American Graduation Initiative, an agenda targeting community colleges but with the broader purpose of regaining the world lead in college completion by 2020.

The Obama initiative arrived amid a veritable wave of college-completion goal-setting: philanthropy heavyweight the Bill & Melinda Gates Foundation in 2008 pledged hundreds of millions of dollars to double the number of low-income students who complete degrees or credentials. The Lumina Foundation that year proposed 60 percent completion by 2025. Several other nonprofits and industry associations have weighed in.

The notion that most Americans should finish college is comparatively new. As recently as 1970, 11 percent of adults held bachelor's degrees and barely half had finished high school.

Newer still is the pervasive societal fear that we have lost the world lead in college completion. A 2010 report by the nonprofit College Board shows America ranking 12th among 36 industrialized countries in the share of young adults, 40 percent, who hold at least an associate degree. Canada is the nation to beat, at 56 percent.

Catching Canada may be the least of our worries. A new wave of data and research, triggered by a change in federal law, has unearthed alarming disparities in college completion among students of different racial and ethnic groups.

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The latest data show 60 percent of whites, 49 percent of Hispanics and 40 percent of blacks seeking bachelor's degrees attain them within six years of enrollment. The overall six-year graduation rate is 57 percent.

College completion already tops 60 percent in the more privileged sectors of higher education, including nonprofit four-year colleges and the more selective public colleges. Policy leaders have naturally turned to the groups with the lowest rates of success. In public community colleges, the Obama administration's focus, fewer than 30 percent complete associate degrees or credential programs. (Finishing any postsecondary program counts toward the national goal.) Among Hispanics, the fastest-growing racial or ethnic category in higher education, only one-fifth of adults hold degrees.

The Hispanic Scholarship Fund has set a goal that someone in every Hispanic household hold a degree. The Gates Foundation and Obama administration have thrown their weight behind community colleges, where new approaches could yield the 5 million new community college graduates the president seeks.

Several groups have collected examples of "best practices" ripe for replication. Schools with high minority completion tend to track students relentlessly from enrollment to graduation, with reams of data and an "intrusive" brand of academic counseling.

"You really have to start paying attention to these students before they enroll, and you don't stop paying attention to them until you hand them their diploma," said Kevin Carey, policy director of the think tank Education Sector.

That may not be enough. Jamie Merisotis, chief executive of Lumina, suggests that at least 10 percent of public funding to colleges be awarded on the basis of completion, particularly among low-income, minority, adult and first-generation students. States typically fund public colleges based on who enrolls, not who graduates.

Accreditors, the chief accountability agents in higher education, could also pressure schools to address graduation disparities,

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said Kati Haycock, president of the Education Trust.

"There frankly are no real consequences for colleges right now that large numbers of their students don't make it," she said.

7.**Cap athletic subsidies**

Intercollegiate athleticsundoubtedly add to the collegiate experience. But how much, and for whom?

Nine public universities in Virginia charged students more than $1,000 apiece in athletic fees this school year to cover the costs of their programs. The average fee has nearly doubled in 10 years.

Athletic costs are soaring as universities race to build bigger programs with higher profiles. A nationally televised football team is a mighty tool for extracting money from alumni and applications from wealthy out-of-state students.

Critics say the top division of the nonprofit National Collegiate Athletic Association increasingly resembles for-profit entertainment, with million-dollar coaches and ever-lengthening seasons. Some schools have only a small percentage of students engaged in athletics, and athletes only nominally engaged in education.

"You're not providing students with the opportunity to play sports. You're bringing s tudents in to pay money to watch sports," said Margaret Miller, a professor in the Center for the Study of Higher Education at the University of Virginia.

Ninety-seven schools in the Football Bowl Subdivision spent an average $84,446 per a thlete on their athletic programs in 2008, while spending $13,349 per student on academics, according to a 2010 report by the Knight Commission on Intercollegiate Athletics.

The notion of a profitable athletic program is largely a myth. A 2010 analysis of 99 public bowl-subdivision schools by the Center for College Affordability and Productivity, a Washington think tank, found 13 that broke even without subsidies. That analysis found the average athletic "tax," mostly levied in

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added tuition or fees, increased from $395 per student in the 2004-05 academic year to $506 in 2008-09 among those schools.

"Institutions are paying coaches these astronomical salaries ... and, for the most part, drawing down dollars that could go into the academic enterprise," said William E. "Brit" Kirwan, chancellor of the University System of Maryland and former president of the flagship state university. "And, let's face it, College Park is one of them."

Just-departed U-Md. football coach Ralph Friedgen earned about $2 million a year, more than any public university president.

Most colleges operate outside the bowl system, with smaller programs tailored for scholar-athletes who compete for love of the game.

But although such programs cost less, they also earn less. That means higher athletic fees. Schools with wealthy donors, including U-Va. offset the fees with private funds. Less affluent schools can't. Ninety-five percent of revenue in the Christopher Newport University athletic program comes from fees, which total $1,147 per student.

Athletic spending follows a similar pattern at private institutions, where it is not a matter of public record.

Some reformers say colleges would moderate their own spending if the costs were publicized widely. A 2010 report by USA Today included a searchable database of programs.

Others suggest that states could bar public colleges from supporting athletic programs with subsidies that total more than 5 percent of tuition revenue. (The average among bowl-subdivision schools is 8 percent.) Or, Congress could intervene.

For Kirwan and others, the biggest problem is the bowl system, an annual championship ritual that concentrates hundreds of millions of dollars within a small group of schools. Many sports fans, including President Obama , suggest ditching the bowl system in favor of traditional playoffs, with revenue shared equally by all.

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8. **Stop re-teachinghigh school in community college**

A staggering statistic: Three-fifths of students who enter community college out of high school are placed into remedial study, where they are re-taught all the English or math they should have learned in high school. So-called developmental courses confer no college credit and can postpone actual collegiate study by a year or more. Less than one-quarter of students who enter developmental education have completed degrees eight years later.

Remediation is a pedagogical bottleneck, and it's a key reason that less than half of all community college students ever finish their studies.

"What we do know is the current model is desperately broken," said Mark Milliron, deputy director for postsecondary improvement at the Bill & Melinda Gates Foundation, which has pledged hundreds of millions of dollars to reform community colleges.

One obvious target for reformers is the placement system. Most students take a broad test of reading and math skills and, based on their score, are either cleared for collegiate study or sidetracked into remediation.

Placement tests are not diagnostic: "They don't tell you what, specifically, you need remediation in," said Robert Templin, president of Northern Virginia Community College. Remedial students waste precious time re-learning what they already know.

Remedial courses are compre-hensive, lengthy and dull, covering "essentially what you should have learned in high school math and English, but taught twice as fast, in a lecture format," said Davis Jenkins, a senior researcher at the Community College Research Center at Teachers College, Columbia University.

Dozens of colleges, including NVCC, are experimenting with a new approach to placement, one that diagnoses specific areas of weakness for each student. Some schools are also tinkering with the definition of college readiness: a humanities major might

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not need the same math skills as a future engineer.

Such details wouldn't matter much under the old lecture-hall approach. But a new generation of online education programs enable colleges to design custom lessons for each student.

Both NVCC and Montgomery College are piloting variants of the "math emporium" model, named for a successful initiative at Virginia Tech. It allows students to learn only the math they need and at their own pace, with instructors available to help.

"Instead of a student sitting in a class for seven weeks waiting for what they need to know, they walk right into that material," said DeRionne Pollard, the new president of Montgomery College.

Research on 13 emporium-style math courses showed student pass rates rose by one-half, compared with traditional remediation, and instructional costs fell by about one-third. Templin said the model can reduce the duration of remedial study from a year to a few weeks, with a corresponding boost to completion.

Other initiatives attempt to combine remediation with college-level study, so that remedial students don't fall further behind. One, called the Accelerated Learning Program and piloted at the Community College of Baltimore County, "mainstreams" developmental students into college-level courses along with companion classes that provide extra help. Others embed remediation within college-level courses.

Such programs rescue students from the drudgery of dead-end remediation, Milliron said, by combining it "with what they came to college to do in the first place."

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Daniel deVise covers higher education for The Washington Post. He can be reached at devised@washpost.com. He'll be online to discuss this story Tuesday at 11 a.m. ET. *He'll be blogging more ideas all week at* College, Inc.

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Debra L. Billingsley, Executive Secretary

Sam Brownback, Governor

Testimony concerning Telepharmacy
Committee on Vision 2020
Presented by Debra Billingsley
On behalf of
The Kansas Board of Pharmacy
February 21, 2011

Chairman Sloan and Members of the Committee:

My name is Debra Billingsley, and I am the Executive Secretary of the Kansas Board of Pharmacy. Our Board is created by statute and is comprised of seven members, each of whom is appointed by the Governor. Of the seven, six are licensed pharmacists and one is a member of the general public. They are charged with protecting the health, safety and welfare of the citizens of Kansas and to educate and promote the understanding of pharmacy practices in Kansas.

In 2004 the Board of Pharmacy began looking at pharmaceutical care systems in which pharmacists in a central location could use telecommunication technology to oversee pharmacy operations. They discussed ways in which technology could be used to provide patient services in remote or underserved areas that had no access to pharmacy services. Telepharmacy systems utilize real-time video/audio/desktop connections and electronic prescription inspection of images for safe and efficient prescription dispensing.

The Board assigned a Task Force chaired by Frank Whitchurch, R.Ph. to review what other states were doing with telepharmacy. A meeting was held in Hays, Kansas with many independent pharmacists in attendance. They discussed how to define "underserved" and whether telepharmacy would enhance public health. North Dakota and Texas were both operating systems in rural areas and the Task Force wanted the Board to implement a pilot program. This request was made to the Board and the Board's attorney advised that they did not have the authority to enter into a pilot program.

In 2005 Frank Whitchurch, R.Ph. provided an update to the Board and asked that regulations be drafted and adopted so that processes could be put in place to permit telepharmacy. The Task Force had determined that there were significant challenges in certain parts of the state and that prescription medications should be made more readily available. Not only was there an aging patient population but there was also an aging population of

pharmacists. The Task Force and the Board also visited and toured ScriptPro® in Mission, Kansas. Their systems used best pharmacy practices and provided a safe prescription environment.

The Board attorney advised the Board that he didn't think that they had authority to implement rules and regulations without legislative authority. The issue of telepharmacy was set aside for a period of time until Mike Coast, R.Ph, a pharmacist from Cimarron, Kansas came on the Board. He was interested in making sure that the Board provided assistance to those areas in need throughout the state. Mr. Coast, R.Ph. took over the Task Force and they began to meet again on a regular basis. It was clear to the Task Force that the hospital needs and the community pharmacy needs were not the same. Therefore, the Task Force split and Dr. Jim Garrelts took over the Task Force for hospital regulations. It gave the Board an idea of how telepharmacy could work.

The Board of Pharmacy decided to draft regulations even though their attorney advised that they might not have legislative authority. The Telepharmacy Regulations for Hospital were drafted and approved. They were submitted to the Department of Administration and to the Attorney General's Office. The only comment that they had from the Joint Committee on Rules and Regulations was related to direct supervision. The regulations were scheduled for Public Hearing at the September 2010 Board meeting. Several hospital pharmacists were in attendance and they had concerns that the technician ratio had not been properly addressed. They also wanted more specifics on medication leaving the pharmacy for the fill carts and automated machines. The Board voted to improve the language at the request of the pharmacists that were in attendance. Those changes have been made and the regulations are going back through the approval process.

The retail community regulations were drafted and approved by the Board. They were submitted to the Department of Administration and to the Attorney General's Office and have been signed off on. A public hearing for the regulations is scheduled for the March 10, 2011 Board meeting.

We will continue to update the committee as these regulations make it through the process.

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Debra L. Billingsley, Executive Secretary

Sam Brownback, Governor

March 19, 2011

The Honorable Tom Sloan
Chairman, Vision 2020
Capitol Office, Room 55-S
Topeka, Kansas 66612

RE: Community Telepharmacy Regulations

Dear Representative Sloan:

The Board of Pharmacy met on March 10, 2011 for a public hearing on the branch retail telepharmacy regulations. The meeting was held at KU School of Pharmacy and was attended by faculty, students, and pharmacists.

The Board reviewed a letter dated March 4, 2011 from the Joint Committee on Administrative Rules and Regulations. The letter strongly suggested that the agency not move forward with the community telepharmacy regulations. I have attached a copy of their letter for your review. The Board had a lengthy discussion about the Committee's comments. The Board also heard from members of the public who were interested in providing additional access to pharmacy in Kansas. The Board decided to table the regulations until Mike Coast; R.Ph. could meet with Senator Vicki Schmidt, R.Ph. regarding the Committee's concerns.

On March 16, 2011 I met with Senator Schmidt, R.Ph, Michael Coast, R.Ph. and Aron McReynolds, R.Ph. to discuss some of Senator Schmidt's concerns with the regulations. The majority of Senator Schmidt's concerns were regarding the pharmacy technician's lack of training, education, and maturity requirements. Currently, there is no age or educational requirement for pharmacy technicians in Kansas. Some of this would need to be addressed in statute.

Following our meeting with Senator Schmidt, R.Ph. we met with Representative Don Hill, R.Ph. He gave Mr. Coast, R.Ph. and Mr. McReynolds, R.Ph. some suggestions for moving forward with these regulations. Mr. Coast will be reporting back to the Board what we have learned to determine how to deal with this situation. We understand that we do not have to take the Joint Committee's recommendations but since it is chaired by a pharmacist the Board felt that we needed to understand and try to resolve Senator Schmidt's concerns.

Please feel free to contact me if you have any questions or need further information.

Sincerely,

Debra Billingsley

Debra L. Billingsley
Executive Secretary

Encl

c: Board of Pharmacy

STATE OF KANSAS

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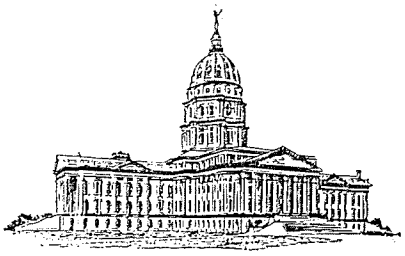

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March 4, 2011

Ms. Debra Billingsley, Executive Secretary
Kansas Board of Pharmacy
900 SW Jackson, Room 560
Building Mail

Dear Executive Secretary Billingsley:

At its meeting on March 1, 2011, the Joint Committee on Administrative Rules and Regulations reviewed for public comment rules and regulations concerning definitions (telepharmacy branch pharmacies); requirements for approval of location; application for approval of a telepharmacy branch pharmacy; equipment requirements; minimum operating requirements; minimum security requirements; renewal of registration; and fees. After discussion, the Committee had the following comments.

General Comment. The Committee strongly suggests that the agency not move forward with these rules and regulations. The Committee believes that the issues which these rules and regulations are intended to address are those involving the number of pharmacists and pharmacies. These have been addressed by other mechanisms and time is needed to determine whether the mechanisms are successful. If the agency intends to move forward, then the Legislature should address the qualifications for a pharmacy technician. In case the agency proceeds with the adoption of these rules and regulations, then the following address issues of Committee concern within each listed rule and regulation.

KAR 68-17-2. The Committee questions the authorizing statute in the History Section of this rule and regulation and believes that the agency does not have the authority to adopt these rules and regulations. Specifically, there are statutory requirements that a pharmacist be physically present and the Committee wonders how the agency intends to enforce supervision statutes under these proposed rules and regulations.

KAR 68-17-3. The Committee questions how the mileage limitations were developed. In addition, it appears that the location of the telepharmacy must be approved before the submission of the application for the registration of a telepharmacy. The Committee believes this would create a problem for the applicant.

KAR 68-17-4 . The Committee believes that subsection (c) in this rule and regulation is redundant since it appears to be covered in KAR 68-17-3. Members of the Committee expressed concern that a pharmacy technician may be the only person physically in the telepharmacy branch pharmacy.

KAR 68-17-5. The Committee is curious as to the length of time the data, video, and audio data are maintained. In addition, the Committee asks whether the equipment required by the rule and regulation is in addition to the equipment required under KSA 2010 Supp. 65-1642.

KAR 16-17-6. In paragraph (c), the Committee questions why the term "supervised" is used rather than the defined term "directly supervised." In addition, the Committee is curious as to how the prescription is to be canceled when there is no pharmacist at the telepharmacy branch pharmacy. The Committee also seeks clarity in paragraph (q), where it appears that schedule II drugs would need to be inventoried only quarterly.

Prior to filing with the Secretary of State, review the history sections of the rules and regulations to update them to the most recent statutory citations, making certain the citations for authorizing and implementing statutes are correct and complete. Please indicate your agency's website address in the filing notice where proposed regulations can be located. In addition, if your agency accepts written comments by e-mail include this information in the public notice. Further, e-mail requests for public accommodation should be included as a part of the notice. Finally, verify that the adoption by reference of any materials included in the regulations is properly completed as prescribed in the *Policy and Procedure Manual for the Adoption of Kansas Administrative Regulations.*

Please make this letter a part of the public record on these regulations. The Committee will review the regulations which the agency ultimately adopts, and reserves any expression of legislative concern to that review.

To assist in that final review:

- Please inform the Joint Committee and me, in writing, at the time the rules and regulations are adopted and filed with the Secretary of State, of any and all changes which have been made following the public hearing.

- Please notify the Joint Committee and me, in writing, when your agency has adopted the regulations as permanent; delayed implementation of the regulations; or decided not to adopt any of the regulations.

- Also, please indicate separately to the Joint Committee and me, any changes made to the proposed regulations reviewed by the Committee.

Based upon direction from the Committee, failure to respond to each and every comment contained in this letter may result in the request that a spokesperson from your agency appear before the Committee to explain the agency's failure to reply.

Sincerely,

Raney L. Gilliland

Raney L. Gilliland
Assistant Director for Research

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