A National Web Conference on E-Prescribing and Medication Management: The New Paradigm for Provider and Pharmacist Interaction
(June 23, 2009)

Good afternoon everyone, my name is Brian Dixon and I am with the Agency for Healthcare Research and Quality's (AHRQ) National Resource Center for Health Information Technology. I would like to welcome you to today's webinar on E-Prescribing and Medication Management. In just a moment I will pass things off to the moderator, Bob Mayes of AHRQ. First I want to go over a couple of logistical points this afternoon. If you would like to take advantage of the full screen option you can push the "full screen view" button on the left hand corner of your screen right by the WebEx logo. If you have any technical difficulties you can call WebEx technical support at 1-866-229-3239. Second, all of our questions during the Q & A period during the second half of the webinar will be directed through the chat feature of WebEx. You probably see the chat box on the right-hand side. Please make sure when you type in questions that you direct them to all of the panelists. That way, our panelists can see them while they are responding and read them ahead of time. Finally, in a few moments I will begin a pre-conference survey. We use this data for quality assurance purposes and to monitor how well the technology and presentations are working online. Please do provide your feedback.

At this time I would like to turn it over Bob Mayes, who will introduce our panel and get us started.

Thank you, I'm Bob Mayes. I am a Senior Advisor on Health IT here at AHRQ. Welcome to what is the second of three national web conferences on E-Prescribing and Medication Management. In the first of our series we looked at the impact of electronic medication management on the prescriber and the clinician. This conference we are looking at the impact of medication management from the pharmacy perceptive as well as how electronic medication management is impacting the relationship between medical clinical providers and pharmacists. In the final teleconference (in August) we are going to take a look at the impact on medication management on the patient and on adherence.

We have three great speakers today. Michael Rupp serves as Professor of Pharmacy Administration at Midwestern University College of Pharmacy in Glendale, Arizona.   Dr. Rupp is the founder and managing partner of MENTORx, a professional services consulting firm as well, he is the creator of PharmAccount, an Internet-based provider of financial analysis services for community pharmacies. Steve Simenson is president and managing partner of Goodrich Pharmacies in Minnesota, he has conducted various practice based research looking at medication therapy management, collaborative practice, employer health and wellness services and compounding. He serves on the Board of Trustees of the American Pharmacists Association. Currently, he is also president of the Minnesota Pharmacists Foundation. And finally we have Dr. Peter Kaufman who is the Chief Medical Officer for DrFirst. Dr. Kaufman is a board certified gastroenterologist who as well as continuing is medical practice serves as a representative to the Physicians Electronic Health Record Consortium (PEHRC) and as a delegate to the American Medical Association. He also participates on the CHC IT stand alone e-prescribing and the HIMSS e-prescribing work groups. Today we are going start with a presentation by Dr. Rupp that will be examining how an e-prescription is received and processed and the significance of high quality patient data for the pharmacist. He will share empirical evidence of enhanced efficiency and productivity as well as a decrease in costs for those pharmacies with e-prescribing functionality. Mr. Simenson will share his first hand experiences with implementing and utilizing e-prescribing. He will also discuss the importance of coalition building and the changing paradigm in relationships between providers and pharmacists. And finally we will close with Dr. Kaufman who will discuss the technical limitations and challenges facing e-prescribing. He will examine the bidirectional relationship between providers and pharmacists and discuss potential benefits and impacts on outcomes for pharmacists reporting back to clinicians. As Brian noted, while the presentations are going on feel free to send in your questions and after all three presentations I will moderate the questions and get the relevant panelists to answer. We will answer all of the questions when we put together the transcript for the teleconference. And with that I will turn it over to Dr. Rupp.

Thank you Bob and good afternoon everyone, as Bob indicated my role in today's presentation is to provide the pharmacy perspective from a pharmacy practice based academic research level and I will leave the micro level for Steve Simenson to address at the store level. I will end this with some pretty specific practice based recommendations that we have distilled from some of our research in this particular area. To begin, this figure shows the role of SureScripts in connecting electronic prescribers with pharmacies through their respective software vendors and gateway partners. While this is still a unidirectional flow of information from the prescriber to the pharmacy the potential exists for a much more bidirectional flow of information and we will talk about that later because it really reflects my primary interest with this technology. This figure illustrates the path of a conventional prescription after it is received at the pharmacy. As you can see our tired little claim still has a long journey ahead through switching companies and claims processors and pharmacy benefits managers during the claims adjudication process and finally a message is sent back to the stores with payment verification and not uncommonly a host of additional actions required by the pharmacist, which might include prior authorization, formulary enforcement, drug utilization review (DUR) edits and so on. Also, note that the pharmacy pays for the switch and the claims processor for each of these transactions, which is certainly an important element to the pharmacist. Now as we then forward this to take a look at electronic prescriptions what you see is that the electronic prescription's path is almost identical except for one important difference and that is that the pharmacy is charged for the incoming prescription order, which is free when it arrives via any other route such as phone, fax or just carried in by the patient. These charges are particularly modest on the order of 25 to 50 cents industry wide, generally, but they add up when you are writing 5,000 or more prescriptions per month. And this probably represents in part the resistance to e-prescribing amongst some pharmacists in particular among independent community pharmacies, which as we will see in a moment, lag somewhat behind the adoptions of this technology. Many people believe that we have reached and surpassed the tipping point for this technology and I think that in the future this will be the dominant means by which prescriptions are transmitted and processed in the community practice setting and that is one reason why I and many others have committed to improve this technology and to getting rid of little glitches that we still have, once again when you think about this poor tortured little claim and the path it goes through it is not a surprise that it meets a hiccup or two along the way with this advancing technology.

This slide reinforces what most of us already know and that is that the vast majority of chain pharmacies are actively receiving and processing electronic prescriptions while independent pharmacies continue to lag but it is inevitable that they will be forced to participate whether they want to or not and now what we have passed this tipping point I think we will see adoption to accelerate among independent pharmacies, but it does raise important questions, one of which is what are the benefits of e prescribing to pharmacies and what benefits do pharmacies recognize, which again is constitutes a significant amount of work that we have done in this area. Here is a list of potential benefits to pharmacies and I guess I would really point out bullet point one, it represents something of a holy grail to the pharmacy. At the very least electronic prescribing ensures that pharmacies can feel relatively certain that they are interpreting what the prescriber ordered. Now it still might be wrong, the prescriber might of made a mistake but at least the order is legible and I think you have to be a pharmacist to really understand what a huge benefit this is to a pharmacist and his or her technicians. In addition to that there are a variety of other potential benefits like reducing data entry errors, improving productivity and efficiency that hopefully the costs are reduced and hopefully all of this will translate into increased time spent with the patients and loyalty among our patients. Once again some significant benefits to the pharmacy, and we have been trying to put some empirical verification on these, potential benefits are what we will talk about next. This chart comes from a 2004 work sampling study we did of chain pharmacies in Rhode Island. In this study we had electronic prescriptions compared to all others that is handed in phoned in and faxed in to determine if they really did require less personal time to receive process and fill and as this chart illustrates renewal electronic prescriptions were associated with significant improvements in processing productivity both from pharmacists and technicians with the exception of pharmacists time dedicated to refill prescriptions for which there was no difference between electronic prescription and all others. But in renewed prescriptions the technicians' time and for new prescriptions for both pharmacists and technicians there were significant improvements in the month of time they had to spend in the various aspects of receiving, dispensing and processing prescriptions. This is from the same study and it was an indicator of satisfaction. It illustrates that both pharmacists' and technicians' view the electronic prescriptions as

superior to traditional prescriptions for processing speed and overall satisfaction. Technicians are routinely, at least in our studies, a bit more enthusiastic then pharmacists, but certainly both seem to view it well in comparison with conventional prescriptions. The conclusions from this study are that electronic prescriptions are associated with significant saving is pharmacy personnel's time and this is important when you consider that somewhere around the order of 60 percent or so of the operating costs incurred to dispense a prescription by the pharmacy is the cost of personnel. So anything you can do to drive down personnel costs on a per prescription basis will significantly improve and lower the average cost of dispensing. The reduced labor costs that we saw have been updated in this slide to 2009 values and they compare very favorably to the transaction costs that pharmacists are having to pay to retrieve electronic prescriptions in addition to improved satisfaction.

This chart comes from a 2006 AHRQ funded study that we did in collaboration with SureScripts. We did this study in 422 chain pharmacies in 6 states, this slide represent the results from 446 community pharmacists. The pharmacists were very positive, especially on the impact of the perceived impact of e-prescribing on patient safety, effectiveness and efficiency of care. The pharmacists were positive but some were less so regarding the net impact on relations and communications with patients and physicians and that is something that I want to touch on and I will come back to that particular point. This is from the same 2006 study, satisfaction was found to be high across all pharmacy personnel classifications, once again with technicians and interns being somewhat more satisfied than pharmacists, but once again electronic prescribing overall was evaluated very highly with the technicians and pharmacists in at least this study. We collected during that AHRQ study in 2006 over 2,200 comments from pharmacists and technicians of whom the majority were negative comments despite the fact that overall there were satisfaction and personnel were pleased with e-prescribing and maybe that is just a reflection of human nature more than anything else.

This particular chart demonstrates the breakdown of the positive comments, the 43 percent of those 2,200 comments that were positive, improved legibility and clarity of the prescription order dominated are positive comments, followed by improved speed or efficiency of workflow and reduced disruptions and the followed by increasing integrity and accuracy of the prescription order, which many pharmacists and technicians find as a significant advantage in electronic prescribing.

These are the other 1,200 or so of the 53 or 57 percent rather of the negative comments from pharmacy staff. Prescribing errors especially drop down menu selection errors and dosage errors represent the single largest category of mistakes we had followed by delays in prescription order.

You will notice that five percent of the negative comments related to the view shared by the number of pharmacists and technicians that eliminating the physical exchange of a hard copy, written prescription between the physician and the patient seemed to result at least in their minds in a less informed patient that appeared to be much less active participant in their care when they arrived at the pharmacy and this led us to consider whether there needed to be some way of re-inserting this aspect of traditional prescribing back into the electronic prescribing process. That physical exchange of the written prescription order appears to represent a convenient opportunity for that physician to exchange information and for the patient to feel like they are involved in the process, and for the physician to kind of reinforce the therapy they are prescribing, and at least in the view of number of pharmacies and technicians, that seemed to be missing in electronic prescribing, something that was frankly a real shock to me and I certainly didn't expect those particular comments.

I don't want to spend much time on this particular chart except to point out that in our study the incidence of prescribing errors and related problems that pharmacists observed on electronic prescriptions we're very similar to that incidences that have been observed in previous studies of conventional prescriptions, which suggested that the patient safety improving potential of e-prescribing has not been fully realized. That is something we need to continue to work on, nor was it worse in previous studies that used virtually identical methodology.

During the course of the 2006 studies we collaborated with the National Alliance of State Pharmacy Associations (NASPA) to create a web portal to allow for the reporting of pharmacist interventions of

electronic prescriptions. Since that study ended NASPA has collaborated with SureScripts to continue that effort in what there are calling their PEER Portal (Pharmacy E-Prescribing Experience Reporting Portal).

The PEER Portal represents a mechanism of ongoing surveillance of e-prescribing in the community setting that could serve as a first alert to problems and as this slide indicates, SureScripts intends to issue bulletins and alerts to their certified solutions providers that is for software vendors and perhaps even a new certification requirements based on reports generated through the PEER Portal, all intended to be part of a system wide continuous improvement program.

So it would be great if we had an awful lot of pharmacies that routinely processing electronic prescription that would utilize this PEER Portal to continue to provide us with accurate data regarding the continuing problems, issues and glitches we have.

Several slides reinforcing how very simple, quick and easy it is to use the PEER Portal. And really for those folks that are familiar with for example the Food and Drug Administration's adverse reaction program, the PEER Portal is somewhat reminiscent of that program intended to be quick and easy to use.

I wanted to get to our best practice recommendations these are all from previous research and particularly from our 2006 AHRQ funded study. We distill a total of 11 best practice recommendations. Some of these are directed towards prescribers and or their software vendors, and some are directed at pharmacy staff and some are directed toward other agencies and stakeholders in electronic prescribing. I might also add before we get into this that a number of these have been since implemented and others are in the process of implementation, which is something we remain very active in.

Number one, physicians should perform their own e-Rx data entry. It was observed by a significant number of pharmacists and technicians in their belief that physicians had delegated this to support personnel when they probably shouldn't, so we strongly recommend that physicians do their own data entry or at very least review those before they are being transmitted to the pharmacy.

The second point here, and at least in our study, very few of the subscriber side decision support software systems had been enabled and were routinely being used and we're strongly suggesting that those be turned on. Many of the errors we saw coming into the pharmacies probably wouldn't have occurred if those decision support software applications had been turned on.

Third point, all of the electronic prescriptions for a patient are pharmacists and technicians recommended be bundled so that when they come in electronically to a pharmacy, the pharmacy staff knows that this is one of say, three or four electronic prescriptions that they will be receiving for Mrs. Smith.

All three of the recommendations that you see here really relate to how pharmacies implement electronic prescribing and train and supervise staff to support it within the practice. My sense is that certainly most of the chains have already implemented all of these, certainly as independent community pharmacies come on-line we are hoping that they will take a look at these and consider implementing them as well but I believe that most of these have been implemented in the chains, at least the chains that were involved in our study.

Going further, this point one relates to the need for more uniformity among e-prescribing applications that would reduce the need for action at each the receiving pharmacy. Naturally each one of the system vendors has its own way of doing things, and this multiplicity of approach creates some problems at the pharmacy level.

Point two comes from many comments received from pharmacy staff that patients have unrealistic expectations of e-prescribing, just because the physician has sent the prescription electronically to the pharmacy next door doesn't mean that you can walk next door and it will be ready. Maybe giving patients a better more realistic expectation of what this technology can do and what it can't do, and finally, the

third point, the Controlled Substances Act provides that schedule two controlled substances may only be dispensed by pharmacist pursuant to a written description except in any emergency situations.

In June of last year of the Drug Enforcement Administration (DEA) released a proposed rule that would revise its current regulations to allow electronic prescribing of controlled substances. This proposed rule would allow electronic prescribing of controlled substances including scheduled two drugs providing certain standards are met and I believe a final rule on this is expected as early as this summer which will overcome a significant barrier. Pharmacies do not like to maintain two separate systems. One for non controlled prescriptions and one for controlled prescriptions.

The pharmacy e-Rx processing procedures should eliminate the routine printing of eRx's we actually at that time we still had pharmacies that were receiving the prescription electronically and then printing them out and then re-transcribe them into the system which naturally eliminates a lot of the potential benefit to this technology.

And the second point there, a clinical health information exchange task force has been formed within the National Council for Prescription Drug Programs (NSPDP) and that task force is currently working to develop new electronic data exchange (EDI) transaction that will allow for interactive exchanges of information, including queries between prescribers and pharmacists. The acronym for this task form is CHIX (Clinical Health Information Exchange) and people interested in contributing to that and I would encourage you to contact Lynn Gilbertson, the Vice President of Standards Development at NCPDP.

And very quickly, this chart comes from a 1999 study by my colleague at the University of Arizona, Terry Warholick, while she and I were both at Purdue University. The objective of this was to determine whether enhancing the patient information available to pharmacists during the prescription processing improves the quality of their drug utilization review decisions and we found that it did at every level of improved patient information, but a particularly big bump came from having just one additional piece of information available to the pharmacist during their review and that is the patient's diagnosis.

We have in collaboration with are in-state initiative, Arizona Healthy Connection recently submitted a proposal to AHRQ to implement e-prescribing in Arizona community health centers, and part of this proposal will implement the routine transmission of patient diagnoses with the electronic prescription. This is something that she and I both had as commissioned pharmacy officers in the Indian Health Service and in my case, that practice was 30 years ago, and it is hardly a new concept. And the potential for electronic prescribing serves as a mechanism for providing all pharmacists with decision critical information when needed is very exciting to me and probably represents the primary reason for my interest in this particular technology.

Just want to leave you all with the notion, just a bit of encouragement to everyone who is assisting in the ongoing improvement of this breakthrough technology, we are not done yet, but we're getting there and let's just keep looking forward. Thank you very much and I will turn it back over to you, Bob.

We will go right now to Steve Simenson's presentation.

Thanks, Bob. I'm really pleased to be able to present my experience with e-prescribing and electronic medical records (EMR) as well as medication therapy management (MTM). I am going to talk to you about the reality of what we can do as pharmacists with the right information and why we should make critical patient care information available to all pharmacists directly involved in a patient's care. E-Prescribing has been a positive step forward in our goals for patient safety but there is a long way to go.

A little background on our pharmacies, we have a group of community pharmacies that have been in business for a long time and followed the niches and opportunities from patent medicines to compounding and now medication therapy management through the years and listened to the needs expressed by both our patients and providers in our community.

We made a huge step by moving off of Main Street and to open a store next to the physicians at their request, and that event 35 years ago was the start of working closer to doctors and building relationships that have allowed us to do what we do today. Those clinics have long since been sold to a large system in our area but because of this initial steps in building those relationships, they continue to improve, which I am happy to say.

It is all about building relationships. Sometimes you can do it sooner than later. We started with early mandates by parallel virtual machines (PVM) with generic substation as patents expired and physicians were more than happy to set up protocols where we could substitute medications that were formulary specific. And we also picked specific drug classes, H2, proton pump inhibitors, non sedating antihistamines and cortical steroids to have a pre-written medical standard order that we could reuse and save the physician time and get the medication to a patient in a timely fashion. We found that any delay in providing the medication at the time of service certainly decreased whether the patient would ever take or use the medication. We continue to build those relationships everyday and it is important to identify staff at any of the clinics or providers you're working with to help champion your cause and that is critical for success. Physicians, we found, do want pharmacists to help manage medication therapy and in reasonable small steps they provide the opportunities for us to do that.

At the same time that we had to build our clinical skills we started in the 90's with American Pharmaceutical Association (APhA) Project ImPACT (Improve Persistence and Compliance with Therapy) and we spun that off when we saw there was not only positive response from the community but the physicians and their patients more importantly, to hypertension, lipid level maintenance, diabetes, osteoporosis and smoking cessation after measuring what the community needed. And at that time not having access to lab values we used Qli Away Monitoring Devices, A1Cs, glucose meters and gathering information that was already available, but unavailable to us being independent pharmacists not in the clinic even though we were close to where they practiced.

We picked up pharmaceutical care from the University of Minnesota and have evolved it into a fairly successful medication therapy management and have changed and modified it to our patients' needs. We do unbiased medication therapy presentations to local providers and physicians and the more they get those presentations, the more they want them, and those connections, communication and relationships built on them being able to let go of some of their daily duties such as medication management.

Their regular small successes lead to big long-term changes, and again, that is provides us with access to more information. As we were building those the next logical step was trying to get more information from the clinics, which was getting information through their electronic medical records -- lab, diagnosis, things that were unavailable at that time.

With that there was about three years of legal struggles convincing the attorneys, not the management and not the medical providers that what we redoing was a good idea. When they finally got comfortable we had a medical standing orders to order labs and to refill prescriptions and also access those electronic medical records whenever it was clinically appropriate.

Interestingly enough, they were more interested in us okaying prescriptions and again taking control and letting us manage those medication therapy issues than all the other things that we really thought were important like access to clinical data that helps provide better care to our patients.

Patient surveys have continually and consistently indicated that our pharmacist have provided a higher level of patient satisfaction, patient education and attainment of treatment goals then our peers and I think that is due in a large part to the added information that we have. As this service has value to the clinics we contract with we get paid a consultant fee to provide these patient based services, so they also place value on what we do and allowing to give up that part of their practice of managing medication up to a certain point.

Part of the goal and effort is too appropriately use EMRs, there are a lot if system legal requirements, your staff needs constant training concentrating on who what where and when the system can be accessed. And you have to convince them that you are close, safe guarders of the information and you also have to address the concerns of staff on your end that you have inappropriate access to their records and they have every option of opting in or out, so pharmacists don't access records of employees even though it is appropriate clinically.

The terminals are in semiprivate areas and it's Intranet based with a password and log in information and you can log into any patient's chart that is in the system. There's about 350,000 patients and not only did the three adjacent clinics give us that information, but also they gave us access to other patients that weren't going to those clinics. And proven again, there's no question pharmacists can be trusted to maintain patient privacy.

Medication questions that we answer every day are innumerable. We constantly confirm diagnosis, off label use, make sure the latest labs have been ordered or order them. And they're not too many questions we can answer with good patient triage you really need to access that electronic medical record. It's part of our daily workflow and we almost take it for granted that we are doing that every day. The EMR charting is being done not only to a document actions and care but to share with other providers to provide better continuity of care. Physicians realize that and as we get access to that information we certainly buy into that concept that we are adding to continuity of care and looking for gaps in that care.

It helps health dollars be spent more economically and efficiently and we can provide more consistent proven patient outcomes helping the physician manage the medication and it is all by our access to the electronic medical records. We can look at prescriptions filled at other pharmacies which means we have a more complete record. A record of things that are sent to mail order pharmacies, specialty pharmacies which is getting more prevalent, looking at specialist consulates and do the reconciling with hospital discharge and rehabilitation and nursing home discharge reports and also dealing with the problem of making sure there is an appropriate narcotic care plan and agreements with a and we know what the rules are that the patients are supposed to follow and hopefully this leads to a future of better care.

Who should control EMR access? This is a fairly compelling one, my personal belief is that patients should have access and control of their own personal health history. Healthcare institutions have proven that entire healthcare team benefits as a patient's medical outcomes when more people and providers have access to that record.

Documentation in communication by pharmacists is much improved and adds to the care of other health-care providers.

The nice thing about Internet access, you can access that technology anywhere and it is not cite specific, as currently in many situations like the VA or other large health systems you do have access but the moment you step out the door other community health providers do not have access to those records. It is technologically possible to look into making sure it is available to all appropriate providers. With patient access and contact proven to be more frequent and consistent at the local pharmacy, EMR access at the site and better care leads to more timely clinical decisions by the pharmacists leading to better patient outcomes.

EMR prescribing versus electronic prescribing, we started e-prescribing three years ago and we're not a SureScripts e-prescribing utilizer at that point. We were used to getting more information so I have a more skeptical view of e-prescribing. It has added to patient safety and we certainly get more legible scripts, but we still have questions that we have become used to asking that are not answered on those prescriptions. Currently when we get an electronic medical record generated prescription, we get the allergies, who the order was entered by and what their credentials are, the time of the order, medical record number, which sometimes helps, and the clinic name and address plus the provider's specialty, which we believe all help.

I apologize for the clarity of this slide but this is an example of patient record, which pretty much as it come though this what we are going to see and this is the small subset of data that we receive. Pharmacists have desired more complete patient information for many years but pharmacists can say that they have all the patient medical and clinical information most of the time, far too few pharmacists regularly get to use electronic medical records to provide care and most would if they could. Beginning with diagnosis codes and initial lab values pharmacists can better and more efficiently manage medication therapy. With the implementation of the pharmacists MTM the specific patient information is even more necessary to make good patient care clinical decisions. It is amazing that pharmacists have done so well for so long navigating and making medication decisions in partial darkness.

Community pharmacy with EMR access have the ability to save prescriber precious times, to decrease unnecessary provider visits and labs and lead to increased patient satisfaction for all providers.

With the advent of MTM, EMRs have come to be an excellent tool to making our process of MTM more efficient and more prepared when the patient comes into for their visit. Data can be grouped and gathered by category and distinct sets like labs and in counters unlike paper charts. And in preparation for a medication therapy review, the EMR lets our pharmacist check for all recent lab of values, the evaluation of medication appropriateness, problems, initial outcomes and drug induced problems. Comparing EMR medications records against the pharmacy records for compliance in dosing or against shared pharmacy records from other pharmacists, that are routinely provided for patient that our not routinely ours.

We check provider charts for patient outcomes and concerns, complaints, diagnosis and provider goals and follow-ups. We check for visit timing and needed procedures and follow-up determined by best practice parameters. The patient personal medication record can partially be completed EMR data and pharmacy system information by the core elements of MTM.

At the time of the patient visit, you can review all phone calls made to the patient and specialist referrals and documentation they are all available in the EMR. Questions developed and unanswered can be researched on the EMR and related to the patient at the time of visit. Previous patient consults, recommended test and labs. Patients understanding of physician goals can be restated or re-related if they were misunderstood.

The initial medication action plans started pre visit with EMR information is completed with face-to-face visit with the pharmacists triage and reconciliation with the patient and their understanding of their medication. Data that is recommended in the MTM core elements are readily attained in the EMR, patient name, date of birth and primary physician and contact information, most current active medications, patient disease states and diagnosis. And post the visit the EMR is also utilized, documentation is available and referral to smart sets and best care practices, we are able to use those.

Your MTM referral from the provider is an open order we can close and document our actions. Recommendations in a report to you provider can be done in the EMR system and put in the physician's work queue which in most cases are answered or addressed by the end of the day. With standing medical orders we can recommend future labs, medication changes and refills can be authorized and other physicians and clinical providers contacted. Charting our documentations, medication order notes in results of our MTM visits are also available to other providers.

Duplicate documentation is always time consuming and inefficient, so not being able to use the electronic medical record to bill is currently a drawback. Those extra steps make MTM a less efficient process and less economically viable. And the next step would be to use the electronic records system to be able to bill for MTM visits. The benefits of EMR are quite large.

Patient information normally collected by pharmacist is usually incomplete and actively fades with time and age of the patient. These are up to date in the EMR. Limited monitoring and lab availability and unfunded cost associated with pharmacy testing are also factors. Costs include time and monitoring

machines and supplies and also the EMR avoids unnecessary duplication of labs already duplicated by the clinic. The physician care plan and SOAP (subjective objective assessment and plan) notes are invaluable in completing medication action plans for patients. They can reinforce goals and strategies already provided by the provider.

Most physicians and providers debrief their work crew every day and the timeline of communication is excellent. Pharmacists and most patients do not like days or weeks for authorization of therapy changes. EMR communication is listed in the patient's chart for future reference and all actions taken by all parties are documented. As grants to physicians are given through the new Federal stimulus packages, I believe it is important that other healthcare providers should be required to have access when they take these funds.

Gathering information and collaborating independently is not only time consuming but can also be frustrating. We believe when we are in the EMR system we are working within the system and not parallel to it or conflicting with it. Physicians are very used to and comfortable with the day-to-day flow and the use of the EMR and we're just another consultant that rely on to provide good patient care that works within the system.

Patients realize that we're working within the system not outside or parallel to it. Pharmacists will have a new role as the professions roll out a new medical home model. Access to the patient's EMR is critical in fulfilling what the pharmacist are trained to do, which is optimizing medication outcomes. And I personally believe physicians are getting more comfortable with letting pharmacists manage those medication outcomes. Making critical decisions and making good clinical decisions are extremely important having the right information at the right time.

Thank you and back to you, Bob.

Thank you, Steve. I did notice one question, what is MTM?

I will answer very briefly. It stands or medication therapy management and it is a label that is being used in the pharmacy profession to talk to a variety of cognitive services that a pharmacist can bring to the table in helping individuals manage their medication therapy. So just a quick answer for MTM. And let's go ahead and have our final presentation by Dr. Kaufman and then we'll open it up for questions although you can certainly type your questions in as they come to you and I will feed them back to the panelist after the final presentation. Dr. Kaufman?

Thank-you very much. I am going to address some of what was hinted at by Dr. Rupp, earlier in the discussion about the bidirectional communication. There is some bidirectional communication now and there are standards from that and the Dr. Rupp and I both work on the NCPDP panels developing those standards panels, some of which are accepted but they're not in wide use for a variety of reasons. And so we will look at some of that and also what is coming. Let me just review the benefits for the physicians and the pharmacists, I'm going to leave the payers out of it. I hope there are none of them on the call but as a practicing physician, we view the payers as the enemy.

For physicians the patient's information is available. The patient's medication history, prescription benefit plan, which includes formulary information can make it a lot easier at the point of care to prescribe knowing what the clinical alerts are going to be and being able to correct the prescription that will generate a clinical alert and being able to find out the patient was already on something similar or was and either had an adverse reaction or it wasn't effective for them or it wasn't covered by their insurance.

So it makes it easier to prescribe the correct things in the first place and then generate an electronic new prescription that giving the pharmacist to clean prescription. Also, renewal responses can come in electronically and while this is not viewed by physicians as particularly helpful, it is viewed as tremendously helpful by their staff. We know practices that have decreased FTEs (full time employees) because the prescriptions come in electronically rather than by the fax machine and they don't have to pull the chart for everyone that comes in. So we are confirming prescription benefits and reviewing the

patient history and eliminating poor handwriting errors which is a problem for physicians too when we get a call back at seven at night and reducing those pharmacy call backs. You are also able to review prescription history and you have a prescription where the physician has viewed that as well and receiving renewal requests electronically to the physician, in addition, getting electronic new prescription and I think Dr. Rupp may have hinted that the number of pharmacies that need to print this out and reenter them after they come in electronically has dwindled to near nothing and I think that is not the case. I think there is still at least one large chain that is having to do that as they roll out new software that will eliminate that and also getting the responses from the prescription renewals electronically as well.

But the most important thing is getting a clean prescription in, so reducing the time spent on faxes and calls and the ideal thing when talking about bidirectional communication is eliminating as much extra communication that is not needed as possible to allow more patient consulting time.

Dr. Rupp showed that slide earlier where he said that pharmacists feel that they have less of a relationship with the patient but if they have more time to talk to the patients because the other issues and the prescriptions are taken care of by this, that will really be good. Also improving patient convenience might bring the patient to the pharmacy and pharmacies do make money when the patients wander around waiting for their prescription but getting the patient in there in the first place is very handy. Talking about the relationship between providers and pharmacies, currently prescriptions come by paper, phone, fax and electronically. Most prescriptions are coming electronically which isn't that bad but it breaks down when there is a need for clarification due to interaction, formulary issue, legibility or patient concern and e-prescribing limits those first three as long as it is an appropriate electronic prescribing system.

And bidirectional messages, with the new prescriptions for the physicians to the pharmacists and the renewal with pharmacist to the physicians and then from the physician back to the pharmacist and soon to be more, as we will discuss a little bit later.

Some of these slides you have seen before but not this one but I am going to just blast through these but I just wanted to show you what is happening with electronic prescribing. Here is a hyperbolic curve, a geometric increase in the number of prescriptions going electronically. Now unfortunately this is just a tiny fraction of the 4 billion prescriptions that are written per year except in Massachusetts where 1 in every 5 prescriptions is electronic but in the rest of the country it is a small fraction but as you can see it is increasing very quickly, the total messaging volume, prescription benefit checks where the system checks and finds out if the patient has coverage and what is covered by the benefit and you can pull down the slides and read this stuff later. Pulling down medication history, routing -- this is the slide you saw earlier, how many are renewals and how many are new prescriptions. And the number of prescribers, over 100,000 prescribers, I think SureScripts presented yesterday that there are 120,000 doctors writing prescriptions electronically now, and that is great. There are only about 500,000 doctors practicing. The number of states that provide data or data is provided, the blue, if you can read this your eyes are better than mine, is 60 percent or more all of these states especially in the east, and the far Midwest, have over 60 percent medication history coming back, and everything but a few states have over 40 percent. This is interesting that California is behind because they are usually ahead in electronic stuff.

So in adoption, this is a little of an older slide, I should thank SureScripts for a lot of the data in these slides, they're were willing to lone this to us and a lot of the data from these slides are from them. As I said there are now about 100,000 prescribers in the network and significant increases in the growth in the last several years at a geometric rate. And back to summarizing e-prescribing in general, we talked about the great out advantages and also the clinical alerts which are an advantage to the patient but also the doctor too, eliminating callbacks and I know that there are not all lot of doctors on this call but doctors really do want to practice good medicine and treat their patients well and being able to get this information at the point of care is considered a positive to doctors. Documentation as soon as you do anything involving this communication, it is documented in your electronic chart for you whether you are using EMR and it is passed over or if you just have electronic prescribing. And speed, yes speed, electronic prescribing is actually faster than paper much to the chagrin of all the people who have been saying that for the past couple of years they do not want to use e-prescribing because it will slow them down.

To summarize the advantages to pharmacists, clean prescriptions and workflow and improves patient convenience and also increases prescription volume. And I wrote more to come here but that was explained by Dr. Rupp and I think I have a slide on this later but I might have taken it out. Improved patients' safety and cost savings for the pharmacy as you saw in the study that was done by Dr. Rupp amd presented by him.

Focusing on the value to the pharmacies, the pharmacies can regain control of their business. There's over 500 million renewal transactions electronically. Pharmacists can save 3 to 4 hours a day on prescription issues between the calls and slower paper prescriptions. And substituting inefficient call back with efficient electronic computerized communication, which are coming up so don't hang up yet. And achieve significant return on investment as Dr. Rupp presented earlier, it is financially viable by pharmacies to use electronic prescribing. Elevate the role of the pharmacist by providing more time for patient counseling and maintaining the professional role of the pharmacist in DUR, also advancing some of that DUR earlier in the process to give the prescriber some of the information at the point of care and reduce the need for DUR. And improving customer satisfaction and care, fewer insurance eligibility issues were the patient has to leave the pharmacy without any medicine at all while the pharmacist deals with a doctor and changes a prescription to something that won't cost the patient $140 out of pocket. Fewer insurance formulary, which is kind of right there, less wait time for renewals, more time for patient pharmacy interactions and reduces the potential for medication errors.

So in general let's talk about some of the limitations and challenges for physician practices. Costs, there is an upfront cost for starting electronic prescribing and that includes both the software and the hardware. And infrastructure. There are many practices, I'm in Maryland and everyone in Maryland has high-speed in their office but I know in many other parts of the country high-speed Internet is not that available and it's really hard to do electronic prescribing over a dial up line. It is to the point of painful if you are using it for all of you prescriptions. But it works okay for those nights and weekends where you have to write one here or there. The deployment of it, the system needs to be rolled out, it needs to be trained, staff need to get involved, it has to get interfaced with other software, that is a limit as well and fitting into the office's workflow. As I was discussing this in a conversation earlier today I think that the solution is to have a flexible enough system that it can fit the current workflow but a strong enough system that the practice will be willing to then modify their workflow a little bit after they get sold and e-prescribing to start doing things more efficiently the way that electronics will allow them to and kind of move away from their paperwork flow, which could then slow them down when they are doing the electronic system, and it was also mention earlier that the biggest limitation, once this is taken care of is failed scripts. And much blame was placed earlier on physicians, when a patient shows up at the pharmacy and fortunately pharmacists are saying, mostly, that I can't find your prescription, and not, your doctor never sent it, but there certainly in the past there were people that would show up they would say that the doctor never sent it, and in the reviews of these prescriptions for the thousands of prescriptions that my company has reviewed, 100 percent of them had reached the pharmacy computer system.

So that is an issue and needs to be corrected by you folks in the audience. So let's talk about what is there and what is coming in terms of bidirectional communication.

The standards are complete and accepted, NCPDP script 10.X has a lot of this stuff in it just nobody is using it yet. There bidirectional user standards not yet in full use. Currently used, new Rx, refilled request and refill response. Other message types that are not used in wide use but are really helpful are IT, cancel prescription and cancel response. So for example, I wrote a prescription and I want to cancel it and I sent off a void for the prescription, sends out a cancel Rx and then I get a message back from the pharmacist that says "great, I got it in time, patient hasn't come to pick it up," or "thanks for sending this patient got his first fill and I will cancel the refills," or "why are you sending this to me months later, patient already got all their refills." And Rx change, so if for whatever reason the pharmacist wants to change the prescription or there is a problem with the prescription can send the message electronically to change the prescription and the response can I either be "no, no need for change,' or "I accept your change." This can save a tremendous amount of time and transcription and verbal transcription errors where somebody can't understand the voice on the other end of the phone and that could be a problem.

Rx fill was tested in 2006 by multiple systems as part of the CMS (Centers for Medicare & Medicaid Services) has AHRQ funded e-prescribing standards testing and proven to work and nobody is sending Rx fill messages and I would be happy if someone wants to send a message saying that they are sending Rx fill messages, and frankly the e-prescribing vendors are forced to add features to their software but the e-prescribing pharmacy vendors are not, and this should be requirement for pharmacies to send. What would be even more important is to add a no fill that the pharmacy shelved that prescription and did not fill for the patient so that when the message is sent back to the PBN, reimbursing the PBN also be sent back to the prescriber saying the patient never picked up the prescription that is now 10 days or two weeks later. Because unless you get 100 percent Rx fill responses, it's really the no fill response that are necessary.

And the final huge one held up by the PBN's is prior authorization. To be able to get the prior authorization at the point of care and 80 percent of these can be immediately adjudicated so the prescription can be sent with a prior authorization, it would save the pharmacist time, the patient time and it would save that practice time.

And so the benefits of the bidirectional occasion are obvious. The efficiency can be automated, and can do one click and instead of a whole message, and also time shifting. You don't have to catch the physician between patients to get an answer.

It could be a detriment however if the question is urgent, so there will still be a reason for phone calls. There is no language issue, as I mentioned earlier, legibility and verbal misunderstandings, and if the system is easier and you don't need to get the physicians or the physician's staff on the phone, pharmacists and physicians are more likely to communicate rather than blow it off because they don't want to hassle with it or they are busy.

So the impacts on outcome for pharmacists reporting back to clinicians electronically the likelihood of a response automated recording of the bidirectional communication, it is documented. Improve relationships between pharmacists and physicians resulting from this communication. That is another thing that was mentioned earlier by Dr. Rupp that the communication between pharmacists and physicians could be better. When I started my practice over 20 years ago it was much better than I actually talked to pharmacists where it is now rare.

And improved patient care in result of the communications.

Hang in there, this is almost done.

So in summary, the routing of electronic prescriptions is a totally electronic transmission of the prescription information from the prescribers fingertips to the pharmacists eyes, no reentering of information, computer to computer, electronic data interchanged and no paper unless required by law or if so one chooses. And vice versa, bidirectional with new requests coming electronically, as well.

It is not simply e-prescribing these days. As was mentioned earlier CHIX is something that is coming and will be not just change requests but other messages back and forth between the doctors and the pharmacists sent electronically through these currently existing systems.

Prescription histories and eligibility in formulary, and somewhat but not completely analogues to the online claims adjudication but using an NCPDP script standard. That is all I have to say and we will all be taking questions. Thank you very much.

Thank you Doctor Kaufman, this is Bob Mayes again. We have gotten several questions and rather than go through each individual I have grouped them. I am just going to start sort of from one of the first ones that came in.

Several folks were interested in how this move toward electronic medication management and e-prescribing impacts the role of the patients in the process. Each of the presenters talked a little bit about potentially whether or not the patient was sort of turffed out of it, or whatever. So maybe each of you could speak just briefly as to what you seen the role of the patient being as we move towards a fully integrated electronic medication management systems.

This is Dr. Rupp, I guess I could start on that and I assume Doctor Kaufman and / or Steve particularly will want to chime in.

It seems ironic to me in the study we did, the AHRQ study, the technology that clearly conserved to improve the exchange of information efficiently can at the same time alienate and distance people. And particularly that very surprising observation that we made that by eliminating that physical handoff of the paper prescription order from a physician to the patient in the office and by eliminating the vestige of an earlier era we have apparently eliminated something important. That exchange represented an opportunity for an encounter and for exchange of information and reinforcement of what the physician is doing and why, and as a result, kind of engaging the patient as an active participant and it seems as we adopt these technologies it is kind of the rule of unexpected results that will have these kind of unexpected side effects, I guess, if you will.

From my perspective, the technologies we are talking about provide additional information, decision relevant information at the point of care for a pharmacist to supports the provision of better care and in engaging the patient has an active participant, and at the same time as we impose these technologies, we have to be careful that we don't do the opposite and alienate and make the patient feel excluded from the process.

This is Steve and it gives the pharmacist an opportunity to talk to the patient at the end of the process when they are actually discussing and getting the patient their medication, what it is, what it's for and reinforce what the doctor told them, which sometimes could be skipped or is skipped, whether it should be or not is a problem but it makes it more necessary to have that patient contact and ensure that patient has an understanding. The downside is getting patients to take more responsibility for their healthcare and their medications and if they have one less thing to do by brining prescription in and that did serve the purpose of them taking possession of part of their healthcare and that is their prescription which reinforced them taking it up to a point.

There was a study done that I had in my slides before I took it out that showed that the number of prescriptions that made it to the pharmacist that were filled and dispensed was increased so I definitely agree with Steve Simenson. And things will be better when there is wider use. There are still problems with two systems being involved, and there is also improvement needed within e-prescribing for embracing all the standards and people using it more. I'm not sure where the data came from that prescribers are not doing the clinical alerts but all systems that I am aware and certainly a requirement of the CHC IT certification, stand alone e-prescribing is to have these alerts present and on by default. And most systems do not allow the majority of the clinical alerts to be turned off, although, you can't filter moderate and mild drug-drug interactions which are clinically relevant less that 1/10th of 1 percent of the time and therefore lead to a alert fatigue. But certainly, the major alerts are showing in the e-prescribing systems, not just ours but other systems that I have seen.

Great.

On to other questions, Steve, I have a real quick question for you, and when you speak of sort of intensive medication therapy management model that you've implemented, there was a question about which patients receive those MTM services.

And that right now is primarily provided by insurance providers, and part D patients and how they provide this service. We are getting more referrals for some physicians who will recognize the benefit of the service but most of those are not funded, so one that have reimbursements tied to them are usually referred through a part PBN processes of some sort.

Bob, this is Mike. To put a finer point on that, if I recall the APhA and NACDS (National Association of Chain Drug Stores) back in 2005 released MTM patient criteria that they were selecting to be used, specific criteria that they felt put patients sufficiently at risk and the intensity and cost of MTM was warranted. Receiving so many chronic medications and having so many current prescribers, suffering from so many chronic diseases, there was a list of those and I believe that it was published by APHA and NACDS back in 2005 and Steve is right, each one of the Medicare part D providers that are providing MTM has adjusted these and used their own criteria internally, but I know that a APHA and an NACDS published something in this just several years ago.

Great.

There is a question around, you know, in the world of EHRs (electronic health records) and EMRs there has been a lot of focus on clinical decision support and I think Steve noted in his presentation at that was in fact one of the benefits that the folks at Goodrich had found in working with EMR versus standalone e-prescribing. But in general, has there been an increased focus from the pharmacy side, on any kind of decision support within electronic prescribing systems, or is that something that is still primarily on the prescribing side?

Well, certainly in the pharmacy there is decision support typically at least in two levels. Number one, there are a variety of expert systems decisions and decision support systems that are reviewing drug therapy, kind of automated prospective drug utilization review that are resident within the pharmacy system itself, in addition, to that, while the claim is being adjudicated at the claims processor slash PBN level the claim is being evaluated by their systems as well. So if anything, we have duplicative systems within pharmacy we have duplicative reviewing of possible inappropriate and inadequate and erroneous types of prescribing. Is that what you meant?

I think that was the intent, was to see whether or not some of the pharmacy focus systems are also looking at the same kind of issues that you see emerging in EMR and EHR.

There are quite a few questions involving standards and how they are evolving in the e-prescribing context in particular, and Dr. Kaufman, I know that you are engaged with a couple of the standard setting organizations, and could you maybe give a brief overview of the movement of what is going on with standards, particularly in which standards are coming up that would enable this bidirectional communication that you had spoken about?

I don't believe that CHIX is part of the NCPDP standard at this point, and I was actually not aware of CHIX until I was told about it by Mike Rupp. But certainly the standards for sending more information with the prescriptions are there in the newer version of script including sending a diagnosis tied to the prescription or multiple diagnoses tied to the prescription. Sending allergy information, and a CMS sponsored study now looking at Rx norm and the fix standard it is to replace for the prescribing information the NDC (national drug code) codes because they are way too granular. And Rx norm, is a better identification of prescriptions and is at this point identifying most of medication strengths and formulation. This SIG (signature) standard is a way of breaking the directions to the patient down into data elements in such a way that they are not only more specifically address and address with standardized terminology and code but the addition that there could be multiple lines of data, so a sliding scale of increasing dose or decreasing dose could be written as a fully electronic prescription, both of those will be utilized to transfer data but will not be read, or are told they will not be read by the pharmacists but they will be used for making sure it that the systems are working properly and for research, but eventually the hope is within enough standardization that these can be used to improve the prescribing process, where the pharmacists would not be reading a text field but the information would be entered into their system as data elements and would be automatically filled at some point.

I will make one brief addendum and that is one question concerning the proposed DEA rule on controlled substances. I think the person wanted to know whether or not the final rule was going to require a paper trail. The final rule is not out but the goal of that rule would be to allow a completely electronic

management of controlled substances. So hopefully when it is out you will get a chance to see what they have come up with based on the many comments that they received on the proposed rule.

There was an interesting question I think having to do with any suggestions one might have for individuals that are coming up in pharmacy, that are pharmacists in training and such. And Steve I noted on one of your slides that you did have a bullet there about pharmacy interns. Maybe you could briefly talk about what your experience has been and what the pharmacy inters experience has been for sort of working with the environment you have been able to create up there in Minnesota.

We have had great success recruiting great future pharmacists who want to participate in a different environment in a pharmacy and provide care to patients through MTM and the have been absolutely priceless as far as how hard they have worked and how they help us staff and document and help eventually see patients with us and follow up and I think it has been a good experience for them to see that there and possibilities beyond traditional pharmacy practice and the training they are getting in Minnesota at most colleges around the country is for that type of practice, not the traditional practice we see today. So I think there are older and more mature and they very quickly grasped the training that they are getting into colleges and fit into the workflow of providing medication therapy management into services for patients.

Dr. Rupp or Dr. Kaufman, anything to add?

I just wanted to reinforce Steve's point. Being brought up as digital natives, I think they're much more comfortable than the older pharmacists and I include myself in that group and as a result I think they're much more willing to adopt more technologies like this and I think that they recognize with any type of breakthrough technology there will be some glitches along the way.

And I think they may be more inclined to work through things.

Just a couple of points I wanted to make, it became very clear to me that when we started evaluating electronic prescribing that we weren't so much evaluating electronic prescribing per say the technology, instead the manner that it has been implemented by a variety of people, the different vendors, certified solution providers, some of those folks do it very well and some do not do it so well. So there is a subtle difference there but it is an important one. We're not really evaluating the technology as we are how it has been implemented.

But the second point getting back to NCPDP and standards development organizations, it seems to me as though, outside of what we're doing and CHIX, which is very important and I'm looking forward to moving them forward, but we do have existing standards, EDI (Electronic Data Interchange) transactions to support an awful lot of bidirectional exchange of information that just simply is not happening because we don't have people that have implemented it in their systems. So until you have business partners that demand some of these existing standards in their systems, it doesn't do a whole lot of good to spend a lot of time pushing them through a standards development organization to get them validated and approved. Just a reminder CHIX stands for Clinical Health Information Exchange, and it is a task group within the NCPDP program and I would encourage folks that have an interest in contributing to this effort to contact Lynne Gilbertson who is the VP of standards development at NCPDP.

Great.

I think it is interesting because one of the things that has come up over and over again both in these presentations and in our initial webinar is the fact that electronic prescribing and if you look at it more broadly, electronic medication management is actually redefining some of the relationships between the prescribers and the dispensers and ultimately, patients. And I do want to remind folks that the third of our series of this series on electronic medication management is actually going to focus on what I see oftentimes is the left out part of this whole thing which is the patient and how electronic medication management is both impacting things like adherence but also how it is offering the opportunity for

individuals to become more directly involved through leveraging these new communication technologies in their own medication management.

We have about five or six minutes left and I'd be happy to continue to take more questions. I did want to remind folks that if they would fill out the Survey before they log off, that would be very helpful for us as we set up a new webinar series as well as when we set up the final one from this series.

This is Peter and I wanted to make one quick comment on bidirectional communications. Most of the SureScripts certified and e-prescribing product and EMR SureScripts certified do have the cancel prescription and the Rx change in them because they are required for certifications. I hope the pharmacist on the line will push their vendors or their chains to implement them because the pharmacy is the final common pathway here and they are the lost consideration for the true bidirectional communication for these standards.

Good point.

There is one very specific question that I found kind of interesting and that is, someone wanted to know, if an e-prescription is sent to a pharmacy and for whatever reason, the patient can't get to that pharmacy and needs to go to another pharmacy, what is the process for forwarding that prescription or redirecting a prescription to the pharmacy for whatever reason the patient ends up going to?

Well one of the solutions is where a pharmacy can transcribe or transfer one prescription to another. And that does not work with narcotic prescriptions, which may be the same issue we have now.

The other solution is for the patient to contact their doctor and the doctor can void out the old prescription hopefully with a canceled Rx and then by putting in another pharmacy name it will send the prescription of to the new pharmacy.

What we do the old-fashioned way, print off the e-script call a pharmacy to give them a heads up and then we will fax them to them. Does not happen too often but they patient is usually happy.

It's sounds like a business modification for HIE (health information exchange). We will see in the future if that works out.

Okay. Unclear just about at the end of the time. If there are any last minute questions, I am watching to see if the pop up.

As I said before, I was strictly tied to get answers to all of the questions that have been asked and see if we can't post those along with the slides, I want to point out that not only will we have the slides up on the web site here, but you will find quite a wealth of other information around health IT on the National Resource Center for Health IT.

Okay. They're is a question about inherent safety and design, but I am not quite sure -- if the submitter can make it a little more specific we may be able to squeeze that last question.

I would like to thank all of you, both the panelists as well as all of you were participating. Again, if you could please fill out the Survey, that would be great, and we hope that you'll join us for the final of this series. We haven't gotten an exact date yet but it will be sometime Sports the end of August. And I need to all very much and have a good day.