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**TESTIMONY  
OF  
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For the National Committee on Vital and Health Statistics Standards  
and Security Subcommittee

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Good afternoon. I am Frank McKinney, E-Prescribing Product Strategist for MDI Achieve. My company is a leading supplier of financial, clinical and e-prescribing software to the long-term care industry. Today, we serve more than 6,000 long term care facility and continuing care retirement community clients throughout the United States. I am also here representing the National Association for the Support of Long Term Care. Together MDI Achieve and NASL are part of the long-term care collaborative that is working to advance health information in long-term care.

My professional focus is health information technology and standards, particularly in the long-term care setting. I led my company's development of electronic prior authorization capabilities for the 2006 CMS e-prescribing pilot and contributed findings regarding standards readiness for long-term care. Today, I coordinate product development and standards strategy for my company's e-prescribing offering.

I also chair the Long-Term Care E-Prescribing Task Group for NCPDP, the standards development organization that manages the SCRIPT standard. This working group consists of vendors, providers and other industry stakeholders,

and is the forum through which long-term care enhancements to the standard are defined and forwarded.

The 2006 e-prescribing pilot taught us a number of things that are important to our discussion today. We began that study with the base standards used in the ambulatory setting, including SCRIPT 8.1 for prescription messaging. During the course of the pilot, we adapted those standards and exercised them in a production nursing facility setting.

We found that certain base messaging worked as-is, such as the patient eligibility and formulary standards. Other messages could be made to work in long-term care after some retro-fitting—adding facility information, for example. In certain cases, the 8.1 standard did not support aspects of the LTC workflow, and new messaging conventions were piloted to support open-ended orders, profile orders (notifying the pharmacy of meds administered from facility stock), and pharmacy notification for resident admission and census events.

Finally, the pilot found that certain SCRIPT messages not commonly used in the ambulatory setting—Fill Status Notification and Cancel—were critical in supporting the long-term care workflow.

As barriers were identified, they were overcome. In response to our findings, a number of enhancements and additions have been made to the SCRIPT standard since the time of the pilot, and are now reflected in the ANSI-approved SCRIPT version 10.2.

MDI Achieve feels that the SCRIPT version 10.2 supports the prescription workflow of the long-term care setting. Other long-term care software companies and the prescription routing networks agree and are adopting 10.2. I can also report that discussion in recent NCPDP meetings has confirmed that the e-prescribing software industry can concurrently support the current version 8.1 for ambulatory settings and version 10.2 for long-term care.

Presently, the long-term care collaborative is finalizing a long-term care EHR-S functional profile that references SCRIPT 10.2, or higher, as the standard to support e-prescribing functionality in this setting. This profile is being forwarded for use by the Certification Commission for Health Information Technology, which is anticipated to begin certifying long-term care products in 2009.

Driven by strong stakeholder interest, the NCPDP LTC e-prescribing task group has proceeded past the essential support of the long-term care workflow to the next levels of opportunity: expanding facility-pharmacy communication to include valuable clinical information—drug safety alerts, current medication profile, allergies, and diagnoses—and adding support for medication administration, inventory, and consultant pharmacist workflows.

Let me talk a little more about e-prescribing in the long-term care workflow. A goal of the 2006 pilot was to test e-prescribing in today's common facility workflow scenario in which the physician doesn't use the clinical systems directly but instead relays prescription orders to the nursing staff. In turn, the nurse enters and sends the order to the pharmacy electronically. This "nurse as agent" process represented the bulk of prescribing activity during the pilot. Direct prescribing by nurse practitioners made up the remainder.

The pilot concluded that while the "nurse as agent" model did benefit from e-prescribing—reducing time spent on communication tasks and yielding benefits to residents in terms of care quality and safety—these benefits would be enhanced if prescribing physicians entered their orders directly in the clinical program to be directly relayed by nursing staff to the long-term care pharmacy. Direct entry by the physician would ensure the clarity of the prescription order and that would reduce the potential of medication errors as well as enhance the efficiency of doctors, nurses and pharmacists.

Subsequent experience supports those conclusions. With full standards adoption and participation by the three partners in this long-term care process: doctors, facility nurses, and long-term care pharmacies, the full benefits of e-prescribing can be achieved. The same set of electronic messaging standards support the range of prescriber participation—from the "nurse as agent" model to direct use by the physician.

MDI Achieve, NASL and our long-term care collaborative believe getting standards established quickly is critically important. A named standard for long-term care will focus vendor development activities—which are currently split between SCRIPT and other, proprietary formats. As a result, providers will have access to compliant e-prescribing software and services sooner.

While lifting the exemption is critical, it is very important that LTC providers are allowed to continue current ordering practices—including use of computer-generated faxes—while software and infrastructure are put in place. Based on the acceleration of SCRIPT 10.2 adoption that would result from a lifting of the LTC exemption, we anticipate that such an allowance could be removed in conjunction with the start of CCHIT LTC EHR certification.

Naming of a long-term care standard must also cite the transaction types that are unique to the setting such as Census and Resupply and those that, while not unique to long term care, provide particular value there: Fill Status Notification and Cancel.

Realizing the full benefits of e-prescribing in long-term care will take time of course, but established standards, stakeholder education, and continued vendor focus are steps we can take now to move toward that goal.

## Appendix One: Summary of Changes Introduced to the NCPDP SCRIPT Standard to Support Use in Long-Term Care

The table below outlines the LTC-specific requirements and messaging solutions that were tested during the 2006 CMS ePrescribing pilot and subsequently added to the NCPDP SCRIPT standard. Solutions were piloted through modifications to SCRIPT version 8.1, and added to versions 10.0, 10.1, and 10.2 as noted.

Topic	LTC Need	SCRIPT 8.1 Use	Pilot Findings	SCRIPT 10.2 Solution
Patient Residency in an LTC Facility	<p>Unit/Room/Bed. It is necessary to identify the resident's location within a facility. The pharmacy will be using this information to sort and deliver medications.</p> <p>Medical Record Number. A patient's residency is tracked through a unique Medical Record Number.</p>	<p>This information, along with a facility identifier, was placed in the second address line in the Patient segment (PTT-060-06)</p> <p>PTT-050 was used to pass the Medical Record Number.</p>	<p>Once the pharmacy vendor was educated on the format and location of the information, they could utilize it.</p>	<p>PTT-080 Location composite added. Has fields for the facility unit, room, and bed.</p> <p>PTT-050 now has a qualifier for the facility identifier.</p> <p>PTT-050 now has a qualifier to indicate Medical Record Number (introduced in 10.0)</p> <p>All changes introduced in 10.0.</p>

Topic	LTC Need	SCRIPT 8.1 Use	Pilot Findings	SCRIPT 10.2 Solution
Patient Admission	The LTC pharmacy needs to be made aware that a new resident has been admitted to the facility. The resident name, location, payer, etc. need to be transmitted to the pharmacy.	<p>SCRIPT 8.1 does not handle this type of notification explicitly.</p> <p>During the pilot, information was sent in the NEWRX: COO-020 was used to convey the primary payer. COO-050 was used to convey a responsible party.</p>	During the pilot, as much information as possible was added to the NEWRX to describe the resident. Upon the resident's first NEWRX, the pharmacy would use this information to add the new resident record to their system. The limitation of this is that a NEWRX was needed. It wasn't sent at the admission time, but later, at the first order time.	<p>10.1 contains a new CENSUS message type, enabling a new admission to be conveyed immediately, before the first order is sent.</p> <p>COO-050 is expanded to handle a full responsible party name. COO-080 was added to have a responsible party address. COO-100 was made available to hold the type of primary insurance. COO-150 was added to hold responsible party phone numbers.</p>
Patient Information Change	If information pertaining to the resident changes, the pharmacy needs to be made aware.	All information is sent in a NEWRX, so the pharmacy would be made aware when a new order is transferred.	If a resident's information changed at a point in time where there was no need for a prescription message, the pharmacy was not immediately made aware – since there was no dedicated census/information message available during the pilot. Therefore, the pharmacy was not informed of patient information changes until the next new order was transmitted (unless the facility notified them manually).	The CENSUS transaction is sent in the event of a change to the resident information. It is initiated when the information is updated, rather than waiting for a new order to be transmitted.

Topic	LTC Need	SCRIPT 8.1 Use	Pilot Findings	SCRIPT 10.2 Solution
Patient Discharge	If a patient is discharged, the pharmacy needs to be made aware so they can stop or hold the delivery of the medication to the facility.	The CANCEL transaction was used to convey a discharge. REQ-030 would have a D1, D2, or D3 that would indicate a Expired Resident, Return Not Expected, or Return Expected respectively. The facility would send a representative order and the pharmacy would then determine what to do with the orders.	Once the pharmacy knew how to interpret the discharge codes, they would properly handle the orders. The use of the CANCEL transaction for this purpose led to some confusion on how to handle the active orders and the pilot exposed a need to develop a hold process.	The CENSUS transaction will explicitly handle this event without the misuse of a CANCEL transaction. The CENSUS UIH 010 field calls out the D1 – D3 discharge reason codes along with an additional code for Discharge Other. It will be triggered at the proper census event and will not need to be coupled with an order.  REQ-070 was added to hold the CENSUS event date.
Medication Changes	Most orders in the LTC setting are “open orders,” to be administered on an ongoing basis until discontinued by the physician. If a physician desires to change an active order, they would submit a change request to the pharmacy.	The CANCEL and NEWRX transactions were used to convey this change. The original order is canceled, and a new one was sent as a replacement. The UIH-030 field was used to tie the two transactions together. They would relate the changed transactions to the original order.  The REQ-010 field was used to convey the severity of the change (C1, C2)	During pilot, the pharmacy vendor could process the CANCEL and NEWRX together in the manner fitting their processes. It may mean a new order or a changed order on their system.  C1 was termed as a significant change and C2 was termed as an insignificant change. During pilot, the need to differentiate a third category—administration frequency change (C3)—was identified.	The 10.1 specification identifies how the user should use the UIH-030 field – using the original order id to tie the transactions together.  10.1 also identifies the C1, C2, and C3 codes as valid codes for the REQ-010 field.

Topic	LTC Need	SCRIPT 8.1 Use	Pilot Findings	SCRIPT 10.2 Solution
Discontinued Orders	The LTC facility periodically needs to discontinue open medication orders.	In 8.1, the CANCEL message was used to discontinue open orders.	For Pilot, it was agreed that the CANCEL message would be used to discontinue open orders. The sender did not differentiate this use (discontinue) from the conventional use (canceling a prescription not yet dispensed). This didn't pose any immediate issues.	A new field was introduced in 10.0 (REQ-060) that allows the user to indicate that the CANCEL is intended as either a discontinuation of an open order or as a cancellation of a new order..
Profile Orders	There is a need to inform the LTC pharmacy about <i>all</i> orders in force for each resident, not just those it dispenses. Therefore, a facility may pass orders to the pharmacy and indicate that they are for "profile" use, and should not be filled.	The 8.1 NEWRX does not allow for a "do not fill" (DNF) indicator.	For pilot, "DNF" (do not fill) was specified in the quantity field, indicating the message was for profile purposes only.	In 10.1 (introduced in 10.0) there is a new field DRU-130 in which the sender can specify "DNF" (do not fill), indicating the message is for profile purposes only.

Topic	LTC Need	SCRIPT 8.1 Use	Pilot Findings	SCRIPT 10.2 Solution
Order Resupply	The LTC pharmacy may automatically resupply active medication orders to the facility based on a schedule or other process. Sometimes, the facility runs out or runs low without the pharmacy being aware—for example when medications are dropped or used more quickly than anticipated.	Version 8.1 does not have a RESUPPLY transaction nor an equivalent method for conveying a low supply of medication.	For pilot, the RESUPPLY request was handled manually and not through a transaction.	10.1 introduced the RESUPPLY message. This message will allow a facility to inform the pharmacy that more medication is needed to support an open order.
Order Delivery Urgency	An LTC pharmacy commonly supplies medications to the facility on a fixed delivery schedule, supplementing urgent prescription needs with as-needed special deliveries. When an urgent medication need arises, the facility must notify the pharmacy of the special delivery timing required.	Version 8.1 does not provide a way for the prescriber to indicate delivery urgency on prescription requests.	Communication of special urgency was accomplished via telephone or fax.	10.2 added the ability for the sender to specify the urgency on a new prescription or resupply request.  Using element DRU-140, the prescriber can notify the pharmacy of the date and time by which the medication is needed.

## **Appendix: Long-Term Care E-Prescribing Message Set**

Removal of long-term care's exemption from the E-prescribing standards must be accompanied by designation of the appropriate message set and version for use in this setting.

Due to the unique aspects of the long-term care medication management process, including the prevalence of open-ended prescription orders, the close inventory coordination with an external LTC pharmacy, and the advisory role of the consultant pharmacist, the set of standard messages named for LTC use must include all those listed below:

- New prescription transaction
- Cancel prescription transaction
- Fill status notification transaction
- Census transaction
- Resupply request transaction
- Medication history transaction
- Prescription change request and change response transactions
- Supporting transactions: Status, Verify, Error

The above message set is supported in SCRIPT versions 10.2 and higher. Accordingly, versions 10.2 and must be designated for use in this setting.