

Appendix L – Table of Tamper Resistant Prescription Criteria and Examples

Summary of features that could be used on a tamper-resistant pad/paper in compliance with the CMS guidelines

Category 1 – Copy Resistance: One or more industry recognized features designed to prevent unauthorized copying of a completed or blank prescription form.	
Feature	Description
“Void,” “Illegal,” or “Copy” pantograph <u>with or without</u> Reverse “Rx”	<p>The word “Void,” “Illegal,” or “Copy” appears when the prescription is photocopied. Except where state law mandates the word “Void” or “Illegal” – it is recommended that the pantograph show the word “Copy” if the prescription is copied. The pantograph should be configured so as not to obscure the security feature description contained on the prescription, the patient and prescriber demographics, or the medication and directions.</p> <p>Some pantographs can be problematic because when the prescription is copied, the resulting “void” or other wording that appears makes the underlying prescription difficult to read. This type of pantograph should be avoided. We suggest that you ask your pad vendor about hollow “VOID” pantograph lettering which is less likely to obscure the prescription information.</p> <p>The Reverse Rx disappears when copied at a light setting – thus making the pantograph more effective in copy resistance. The pantograph may be used with a reverse Rx, but Reverse Rx is not effective as a feature by itself.</p>
Micro printing – To be effective, this feature must be printed in 0.5 font or less making it illegible to the pharmacist when copied	Very small font which is legible (readable) when viewed at 5x magnification or greater, and illegible when copied.
Thermochromic ink	Ink changes color with temperature change.
Coin-reactive ink	Ink changes color when rubbed by a coin.
<u>Watermarking</u> Security back print (artificial watermark)	Printed on the back of prescription form. The most popular wording for the security back print is “Security Prescription” or the security back print can include the states name. Can only be seen when viewed at an angle.
Digital watermarks	Weak digital watermarks cannot be read if copied and strong digital watermarks provide digital rights management/“proof” of origin when copied.
Watermarking on special paper	Special paper contains a watermark that can be seen when backlit.

Category 2 – Erasure / Modification Resistance: One or more industry-recognized features designed to prevent the erasure or modification of information written / printed on the prescription by the prescriber.	
Features to Prevent Erasure	Description
An erasure revealing background (erasure resistance)	Background that consists of a solid color or consistent pattern that has been printed onto the paper. This will inhibit a forger from physically erasing written or printed information on a prescription form. If someone tries to erase, the consistent background color will look altered and show the color of the underlying paper.
Toner Receptor Coating / Toner Lock or Color Lock paper (erasure resistance for computer generated prescriptions <u>printed with a laser printer</u>) OR Chemically reactive paper (erasure resistance for hand written prescriptions)	Special printer paper that establishes a strong bond between laser-printed text and paper, making erasure obvious. Note – this is NOT necessary for inkjet printers – as the ink from inkjet printers is absorbed into normal “bond” paper. If exposed to chemical solvents, oxidants, acids, or alkalis that can be used to alter the prescription, the chemically reactive paper will react and leave a mark visible to the pharmacist.
Features to Prevent Modification	Description
Quantity check off boxes and refill indicator (circle or check number of refills or “NR)	In addition to the written quantity on the prescription, quantities are indicated in ranges. It is recommended that ranges be 25’s with the highest being “151 and over”. The range box corresponding to the quantity prescribed MUST be checked for the prescription to be valid. The refill indicator indicates the number of refills on the prescription. Refill numbers must be used to be a valid prescription.
Pre-printed language on prescription paper Example: “Rx is void if more than XXX Rx’s on paper”	Reduces ability to add medications to the prescription. Line must be completed for this feature to be valid. Computer printer paper can accommodate this feature by printing, “This space intentionally left blank” in an empty space or quadrant.
Quantity and Refill Border and Fill (this is the recommended for computer generated prescriptions)	Quantities and refill # are surrounded by special characters such as an asterisks to prevent modification, e.g. QTY **50** Value may also be expressed as text, e.g. (FIFTY), (optional).

Please note that while ONLY one feature from this Category 2 is required, it is strongly recommended that one feature of erasure resistance and one feature of modification resistance be used. Inkjet printed prescriptions are de-facto erasure resistant based on the characteristics of inkjet ink.

Category 3 – Counterfeit Resistance: One or more industry-recognized feature designed to prevent the use of counterfeit prescription forms.

Feature	Description
Security features and descriptions listed on prescriptions – this feature is <u>strongly</u> recommended on all prescriptions	Complete list of the security features on the prescription paper for compliance purposes. This is strongly recommended to aid pharmacists in identification of features implemented on prescription.
Thermochromic ink	Ink changes color with temperature change.
State Approved Vendor ID	This feature is only effective in states with an approved vendor listing.
Serial number	Number issued by printer of prescription or uniquely assigned by EMR or ePrescribing software; may or may not be sequential. Only valid if reported and tied to the pharmacy claim adjudication process. NY is the only state that has this system currently in place.
Encoding techniques (bar codes)	Bar codes on prescription. Serial number or Batch number is encoded in a bar code.
Security Thread	Metal or plastic security threads embedded in paper as used in currency.

Example of Handwritten Prescription

Front

Void or Copy Pantograph: displays "VOID" or "ILLEGAL" on a color copy of an Rx. It will appear on a wide range of copier settings. (Cat. 1)

SPRINGHAVEN MEDICAL PRACTICE
1234 HEALTH CENTER DRIVE
DAYTON, OH 45408
PHONE 1-937-221-1234 • FAX 1-937- 434-5678

JOHN R. SMITH, M.D.
Lic: 123456 • DEA: XX1234567
NPI: 222222222

HELEN C. DOE, M.D.
Lic: 123456 • DEA: XX1234567
NPI: 222222222

PATIENT'S FULL NAME	SEX	DATE OF BIRTH
ADDRESS	DATE	

Rx 00000001

1-24
 25-49
 50-74
 75-100
 101-150
 151 and over

PRESCRIBER'S SIGNATURE _____
DEA #: _____

TEST AREA Refills 1 2 3 4 _____
No Refills Void After _____

VALID FOR CONTROLLED SUBSTANCES

Preprinted Text Fields: Quantity check boxes, refill indicators, and preprinted limitations or guidelines make the Rx harder to modify. (Cat.2)

Heat-sensitive Image: An Rx, logo, or other symbol printed with Thermochromic ink, so the image changes color or disappears when it is rubbed briskly or exposed to warm breath. (Cat. 1 and 3)

Back

Chemically-Protected Paper: Invisible coating causes "VOID" or a stain to appear on a handwritten Rx when altered by a wide range of chemicals. Toner receptor coating protects laser-printed Rx data from being removed or altered. (Cat. 2) Recommended for use with Preprinted Text Fields

Rx

Security Features List: a prominent display of the prescriptions features, sometimes part of a "Warning Band" or box. (CMS 3)

Heat-sensitive Image: An Rx, logo or other symbol printed with thermochromic ink, so the image changes color or disappears when it is rubbed briskly or exposed to warm breath. (CMS 1 and 3)

Pantograph (Void or Copy Pantograph): displays "VOID" or "ILLEGAL" on a color copy of an Rx. It will appear on a wide range of copier settings. (CMS 1)

Chemically-Protected Paper: Coating causes "VOID" or a stain to appear on a handwritten Rx when altered by a wide range of chemicals. Toner receptor coating protects laser-printed Rx data from being removed or altered. (CMS 2)

Preprinted Text Fields: Quantity check boxes, refill indicators, and preprinted limitations or guidelines make the Rx harder to modify. (CMS 2)

Rx

Security Features List: a prominent display of the prescriptions features, sometimes part of a "Warning Band" or box. (Cat. 3)

Example of a Color Copied Prescription

SPRINGHAVEN MEDICAL PRACTICE
1234 HEALTH CENTER DRIVE
DAYTON, OH 45408
PHONE 1-937-221-1234 • FAX 1-937- 434-5678

JOHN R. SMITH, M.D.
Lic: 123456 • DEA: XX1234567
NPI: 222222222

HELEN C. DOE, M.D.
Lic: 123456 • DEA: XX1234567
NPI: 222222222

PATIENT'S FULL NAME	SEX	DATE OF BIRTH
ADDRESS	DATE	

Rx 00000001

1-24
 25-49
 50-74
 75-100
 101-150
 151 and over

PRESCRIBER'S SIGNATURE _____
DEA #: _____

TEST AREA Refills 1 2 3 4 _____
No Refills Void After _____

VALID FOR CONTROLLED SUBSTANCES

Hollow Pantograph: VOID or ILLEGAL is designed to not obscure or block vital information. Often showing strongest intensity at the "top" or the document. These pantographs generally do not "pop" on a black and white fax

Best Practices for Tamper Resistant Printed Prescriptions (Generated by an EMR)

Category 1

A) Copy Resistance: Microprint signature line*

Category 2

A) Modification / Erasure Resistance: Border characteristics (dispense and refill # bordered by asterisks AND spelled out)

B) Modification / Erasure Resistance: Printed on “toner-lock” paper for laser printed prescriptions, and on plain bond paper for inkjet printed prescriptions

Category 3

A) Counterfeit Resistance: Listing of security features

*Microprint Line viewed at 5x magnification

THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION

Example A

Washington Medical Group 555 Pennsylvania Ave, Washington DC 20001 202-222-2222 (Fax) 202-222-1111	
Name Jane Q Public	Date 06/29/2008
Addr 123 Main Street	DOB 07/04/1960
City Washington, DC 20001	Ph: 202-555-5555
HYDROCHLOROTHIAZIDE 12.5 MG CAPS One (1) tab by mouth each morning Generic: HYDROCHLOROTHIAZIDE	
Disp ***30*** THIRTY (2)	
Refill ***3*** THREE	
Security features: (1) bold & spelled quantities, microprint signature line visible at 5x or > magnification that must show "THIS IS AN ORIGINAL PRESCRIPTION" & the description of features (3)	
(1)	John Smith, MD NPI# 1111111111

Category #1 – Copy Resistance: Microprint signature line*

Category #2 – Modification / Erasure Resistance: Border characteristics (dispense and refill # bordered by asterisks AND spelled out)

Category #2 – Modification / Erasure Resistance: Printed on “toner-lock” paper for laser printed prescriptions, and on plain bond paper for inkjet printed prescriptions

Category #3 – Counterfeit Resistance: Listing of security features

*Microprint Line viewed at 5x magnification

THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION-THIS IS AN ORIGINAL PRESCRIPTION

Example B

Washington Medical Group
555 Pennsylvania Ave, Washington DC 20001
202-222-2222 (Fax) 202-222-1111

Name: Jane Q. Public
Addr: 123 Main Street
City: Washington, DC 20001

Date: 06/29/2008
DOB: 07/04/1960
Ph: 202-555-5555

HYDROCHLOROTHIAZIDE 12.5 MG CAPS One (1) tab by mouth, each morning
Generic: HYDROCHLOROTHIAZIDE

Disp: ***30*** THIRTY (2)
Refill: ***3*** THREE

Security features include: (*) bordered and spelled quantities, a void pantograph and reverse Rx (when copied - the prescription will say "COPY" and the "Rx" in the upper right corner will NOT be visible), and this description of features.

(3)

John Smith, MD
NPI# 1111111111

Category #1 – Void/Illegal/Copy Pantograph with or without Reverse Rx

Category #2 – Modification / Erasure Resistance: Border characteristics (dispense and refill # bordered by asterisks AND spelled out)

Category #2 – Modification / Erasure Resistance: Printed on “toner-lock” paper for laser printed prescriptions, and on plain bond paper for inkjet printed prescriptions

Category #3 – Counterfeit Resistance: Listing of security features