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

This section summarizes features that could be used on a tamper-resistant pad/paper in compliance with the CMS guidelines. They are categorized according to the three types of tamper-proof features as described by CMS. Features listed more common and easier for physicians to implement than the other features.

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 with or without Reverse "Rx"	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. 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. 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.
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.
Watermarking Security back print (artificial watermark) Digital watermarks	 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. 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 printed with a laser printer) 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 strongly 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.