Machine-readable marking of the single dose of perforated tablet-blisters

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The issues

- Usually the single dose is defined as the basic unit in the hospital computer system.
- The PZN/EAN of the carton box is associated with the house-specific article number by a factor: the number of tablets in the box.
- The PZN/EAN is not the code for the single unit.
An example

Many blisters are not printed with sufficient information
ADKA (German Association of Hospital Pharmacists) and EAHP (European Association of Hospital Pharmacists) made a statement requesting the production of a single dose unit.
EAHP- REQUEST FOR THE PRODUCTION OF SINGLE DOSE-PACKED DRUGS

To improve patient’s safety in drug therapy and to ensure the highest quality in medical treatment in European hospitals, the General Assembly of the European Association of Hospital Pharmacists, EAHP, demands:

- the production of single dose-packed drugs from the pharmaceutical industry.
- the mandatory inclusion of a barcode on each single dose.
The basic problem of the common perforated multi dose blister is the lack of complete information on every dividable single part.
If the oral medication for a single patient is prepared on the ward by dividing multi-dose-blisters, in many cases the unambiguous identification is not possible.
Requirements

We need:
- Substance (INN)
- Brand name
- Dosage
- Application form
- and additional perhaps Manufacturer with logo.

In case of checking the prepared medication with the electronic prescription we need
- a machine readable code
ADKA strongly advocates also for bar-coding single doses with variable data.

The coding system has to identify clearly every dose, package and bundle. There is not enough space for one-dimensional codes.

- We shall use two-dimensional optical codes.

They are small, redundant, of high precision and the printing machinery is affordable. Good readability is necessary.
Conclusion

The GS1-128 standard appears from the European point of view as the best standard.

The Data Matrix Code seems to be a good choice.
What are the problems?

- Both codes parallel: EAN/PZN and Data Matrix
- We have to split the fixed article data from the variable data.
- We must handle the variable data down to the patient level.
- The whole coding system has to be open and accessible to the software houses
- We need obligatory consensus on the European level
Thank you very much for your attention
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