Patch PX\*1\*211 addresses the lack of standardized data in PCE which is a barrier to a number of important areas including: interoperability, clinical decision support, and quality reporting. Standardization of immunizations and skin tests is being addressed by the VIMM project. The goal of this patch is, to the extent possible, to standardize the legacy data in Education Topics, Exams, and Health Factors and to introduce a new V file for capturing standardized codes other than ICD, CPT, and HCPCS. SNOMED CT will be the first coding system supported by the new V file. The ability to use a richer set of standardized codes should greatly reduce the need to create new non-standard data types, especially health factors.

To facilitate standardization of existing Education Topics, Exams, and Health Factors a code mapping multiple is being added to these files. When the legacy data is mapped to standard code(s) it will be indexed in the Clinical Reminders Index by the standard code(s). This allows look-up by standard code, facilitating clinical decision support and interoperability. It also provides a solution to the redundancy problem. For example, if there are multiple health factors that are all mapped to the same standard code they can all be found by a look-up on the standard code. Interoperability is facilitated because the standard code can be used for data exchange.

In the past there has been the need to associate a quantity with a health factor. This was done by storing a comment, which was interpreted as a number using the Numeric function finding function. Because it is using the Comments field, there is no way to ensure that what the user inputs can be correctly interpreted as a number. For example, if the user types “ten” instead of “10”, the Numeric function will return 0 instead of 10. A rigorous approach has been taken to guarantee that when a numeric value is to be associated with a data type it will be a number. Three new fields have been added to the data definition files: Minimum Value, Maximum Value, and UCUM Code. Minimum Value and Maximum Value define an inclusive range for the magnitude. UCUM (Universal Code for Units of Measure) defines a standard unit for the measurement. When the user inputs this data they can only input a number in the defined range. The number and the UCUM code are then stored in the V file entry.

To mark a data type as national or local, PCE used a mechanism based on the entry’s IEN (Internal Entry Number). National entries were designated as such by having an IEN less than 100,000. National entries cannot be changed by sites. Each site was assigned a local number space, the first three digits were the site number and the following three digits were assigned sequentially starting at 001. This effectively allows a site 999 local entries, if the site exceeded that number it could increment into another site’s number space; that has occurred. Additionally, there were bugs that put some national entries into site number spaces so the scheme of using IEN to designate national and local has broken down and that scheme cannot be fixed. To repair the problem a different approach is being taken and that is to add a Class field that is a set of codes with the possible values of National, VISN, or Local. To initially populate this field the list of national Education Topics, Exams, and Health Factors was determined using the VistA Platinum account. The contents of this account come only from nationally released patches so it provides a list that can be considered as national. At sites, any Education Topic, Exam, or Health Factor that is not on this list will be marked as local when the patch is installed.