
VIEWS

Immediate Validations for Mortality Data

Steven Rushing

National Center for Health Statistics



**Gateway to the Future:
Improving the National Vital Statistics System
St. Louis, MO June 6th – June 10th, 2010**



What Is VIEWS?

Validations and Interactive Edits Web Service

An online service provided by NCHS enabling improved mortality data validations during data entry which can be used by state Electronic Death Registration Systems (EDRS.)



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Goals of VIEWS

By providing improved and consistent validations immediately at data entry, VIEWS will:

- Improve data quality at the outset, increasing its value for surveillance.
- Improve efficiency by reducing the number of “rejects” to be coded and late stage “cleanups”.
- Reduce training demands for the EDRS states by providing “smarter” tools. **Validate instead of train.**



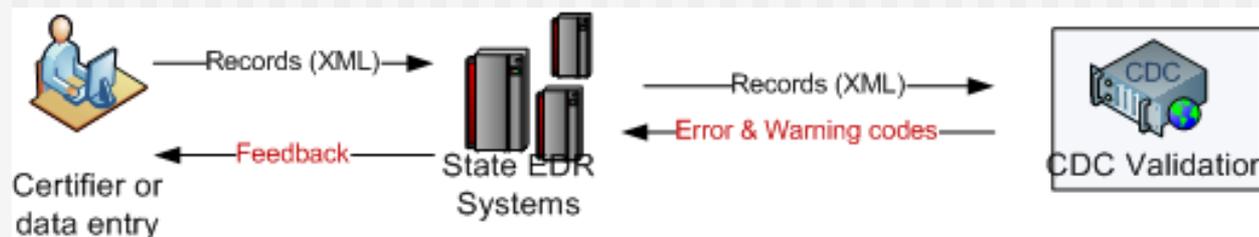
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How Will VIEWS Benefit You?

An EDRS state incorporating VIEWS into its EDRS will gain the following benefits:

- Improved Spellchecking and data quality
- Earlier notice for starting “queries”
- Surveillance
- Free “no work” updates
- Reduced training demands.



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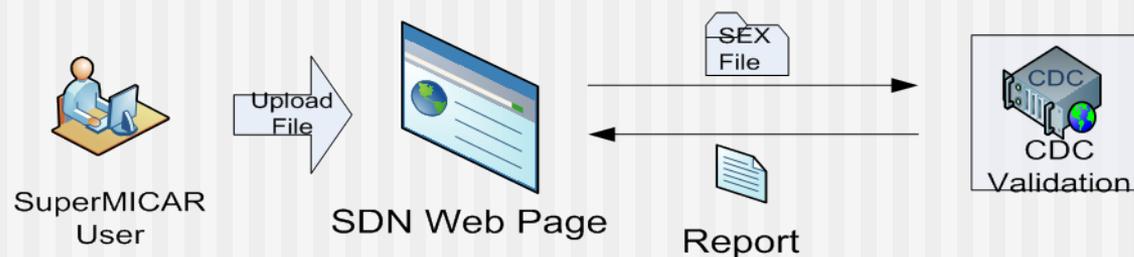
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What Does VIEWS Do?

VIEWS will perform the following checks:

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- Ambiguous Abbreviations
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What Is a Web Service?

A web service is an online component which allows other programs to “call” it and get something done, just like it was a module within that other program. VIEWS uses XML (a common component in modern software with many uses) for communication.

To access VIEWS, a state and their EDRS developer will have to create and incorporate into their EDRS a component that talks to VIEWS.

NCHS **will** support this development **to some extent**.



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What Will the State Control?

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IEWS Is Like A Buffet

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IEWS will perform every check and return information for every level with each submission, depending on what information was sent.

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Is VIEWS Secure?

When it goes live in 2011, VIEWS will be hosted by the CDC and provide typical CDC/NCHS security. During the pilot period, VIEWS will be hosted offsite but still provide typical CDC/NCHS security.

VIEWS will not need (and the EDRS should not send) VIEWS the certificate number.



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VIEWS: Rare Words

There are words which are actual words spelled correctly but almost certainly not the words intended by the provider. Most normal language spellcheckers will NOT spot these as “issues” but VIEWS will.

- **Hart Attack** (*Deer Gone Wild?*)
- **Bran Damage** (*Bludgeoned with muffins?*)
- **Prostrate Cancer** (*Prone while sick?*)
- **Infraction** (*Fatal speeding ticket?*)
- **Rob Caught Fire** (*Rob was a 59 year old female?*)
- **Riffle** (*Lethal shuffling accident in Vegas?*)



IEWS: Data Validations

IEWS will implement functional data validations such as those found in SuperMICAR data entry including:

- Valid entries for day, month, year
- Valid cross-references such as “date of injury” not after “date of death”
- Appropriate Field lengths



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IEWS: Surveillance

IEWS will consult a surveillance list for additional conditions of interest and notify provider that this will be flagged.

These surveillance lists may be state specific and customizable at state's request.

By "cleaning up" more data at data entry, surveillance on the "literals" is made more reliable.



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VIEWS: Trivial/III-Defined

VIEWS will notify data provider if all terms on a record fall within list of trivial or ill-defined causes that the record has no sufficiently specific cause-of-death.

Examples of Trivial/III-Defined terms include:

- Senility
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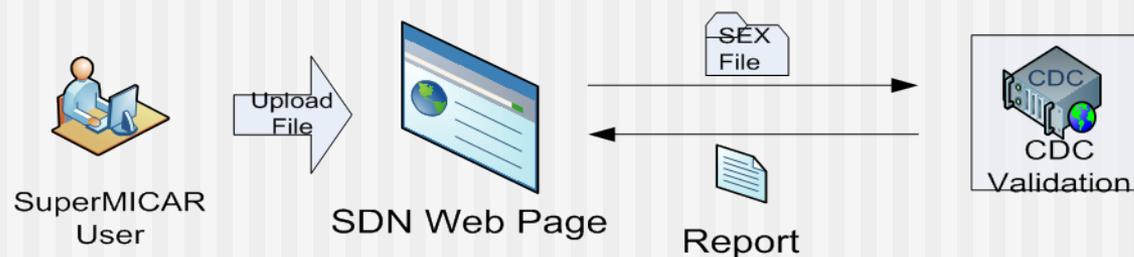
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VIEWS: Spellchecker

VIEWS will provide an improved “mortality focused” spellchecker including:

- Additional medical terms including drugs
- Better, mortality-focused suggestions for choices:
 - **Mellitus** before Militias
 - **Rifle** before Raffle or Riffle
 - **Alzheimer's** before Alchemies
 - **Lung** before **Unk** before **Hung** before **Stung**.

VIEWS Spellchecker will never suggest a rare word.



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VIEWS: Abbreviations

VIEWS will ask for clarification on ambiguous or unknown abbreviations, prompting data entry staff to verify spelling and medical providers to clarify intended entry:

- **CRF:** Chronic Renal Failure or Chronic Respiratory Failure?
- **DS:** Down's Syndrome or Disease?
- **DT:** Due to or Delirium Tremens?
- **EX Obesity:** Exogenous or Extreme?
- **MI:** Michigan or Myocardial infarction
- **CA:** California or Cancer?



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When Will VIEWS Be Ready?

VIEWS will go live for production use in 2011 and be open for all users by the end of that year.

VIEWS will be implemented as a pilot program in 2010, phasing in validations and expanding participants as the year progresses



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VIEWS: What Do You Want?

We want your input.

- Which elements of VIEWS are of greatest interest to you?
- What additional elements would you find useful as we proceed?
- Are you interested in participation in VIEWS?



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VIEWS User Group

The VIEWS User Group can exchange information and input and receive regular updates on VIEWS development and progress.

Information on VIEWS related online discussion groups is available.

You can contact us at VIEWS@CDC.GOV.



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VIEWS Contact Info

You can contact us at VIEWS@CDC.GOV.

Steve Rushing (Srushing@CDC.GOV) is the VIEWS Project Manager and deals with technical issues.

Chuck Sirc (Csirc@CDC.GOV) is the COTR and deals with non-technical issues and matters of policy and support.



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More VIEWS at NAPHSIS

There will be live demonstrations (*“live” as in actually connected to a web service and processing*) of the VIEWS prototype Tuesday June 8th from 1:30-5pm hosted by John Bunch (SRA - VIEWS Development Project Manager john_bunch@sra.com) in the Systems Roundtables room.

The prototype uses sample screens patterned after Utah’s EDEN system. Thanks to Barry Nangle and his Utah staff for their assistance.



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