

# SEER\*DMS

## Change Control Advisory Board

January 30, 2020

*The meeting will begin shortly...*

### *Reminders:*

- *This meeting will be recorded*
- *Please be sure that you used your audio PIN when you dialed in (if not, hang up and re-dial)*



# Today's Topics

- Review the goals of the SEER\*DMS usability project and the reasons for the 2020 changes
- Working with users to help them adjust to the new interface
- Detailed review of the phase 1 changes that were released this week
- Collecting feedback from registry users
- Next steps – sneak peek of other changes being considered for 2020
- Q & A

**SEER\*DMS** v20.20

*Small changes eventually add up to huge results.*

# Initial Review

2015-  
2016

- In 2015-2016, the SEER program initiated an external review of SEER\*DMS to ensure that the system is optimally positioned for evolving needs
- 5 health informatics experts were contracted to perform the assessment
- 4 registries were part of the initial review
- 9 key categories of recommendations were delivered in a final report to NCI
  - Governance & Communication
  - Usability Evaluation
  - Enhanced Linkages
  - Consolidation
  - Case Upload Portal
  - Integrated Report Writer
  - NLP, Automation
  - Security
  - System Architecture

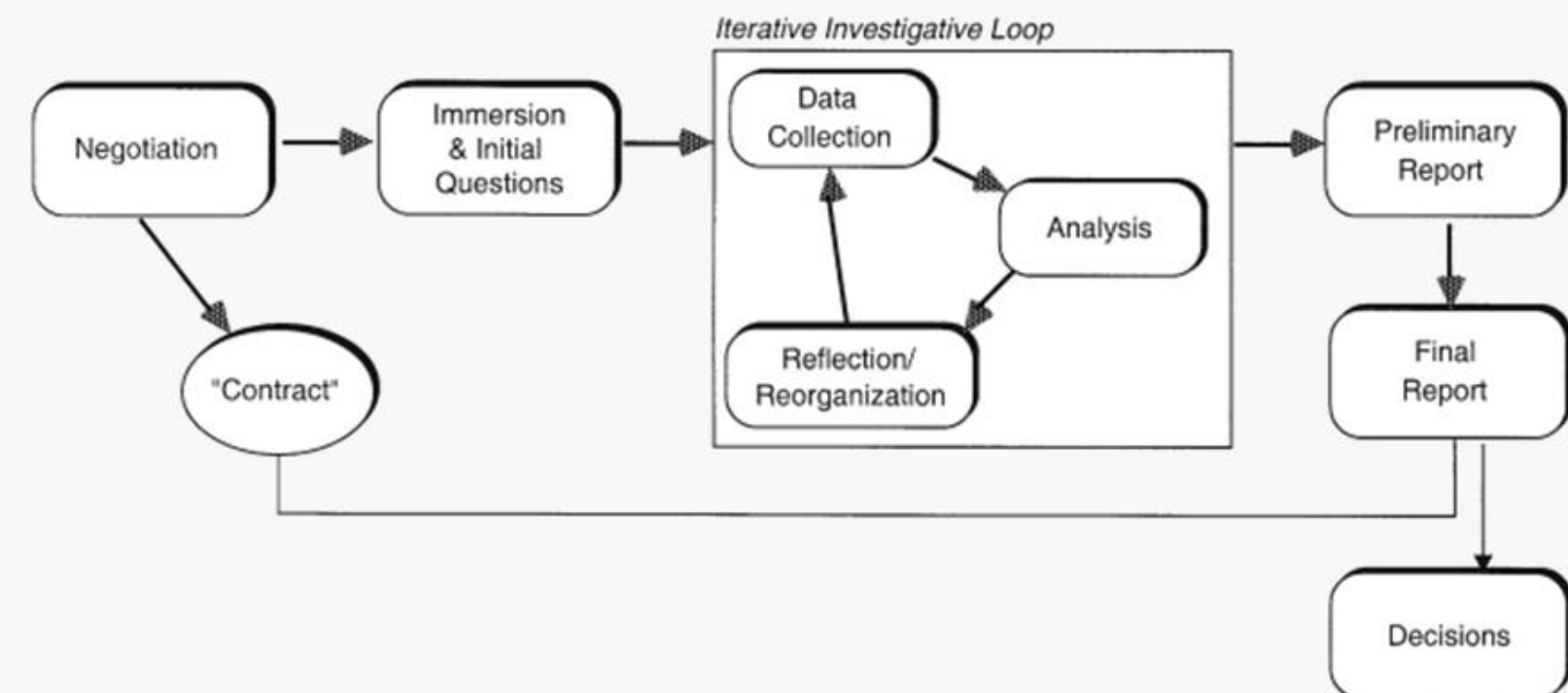


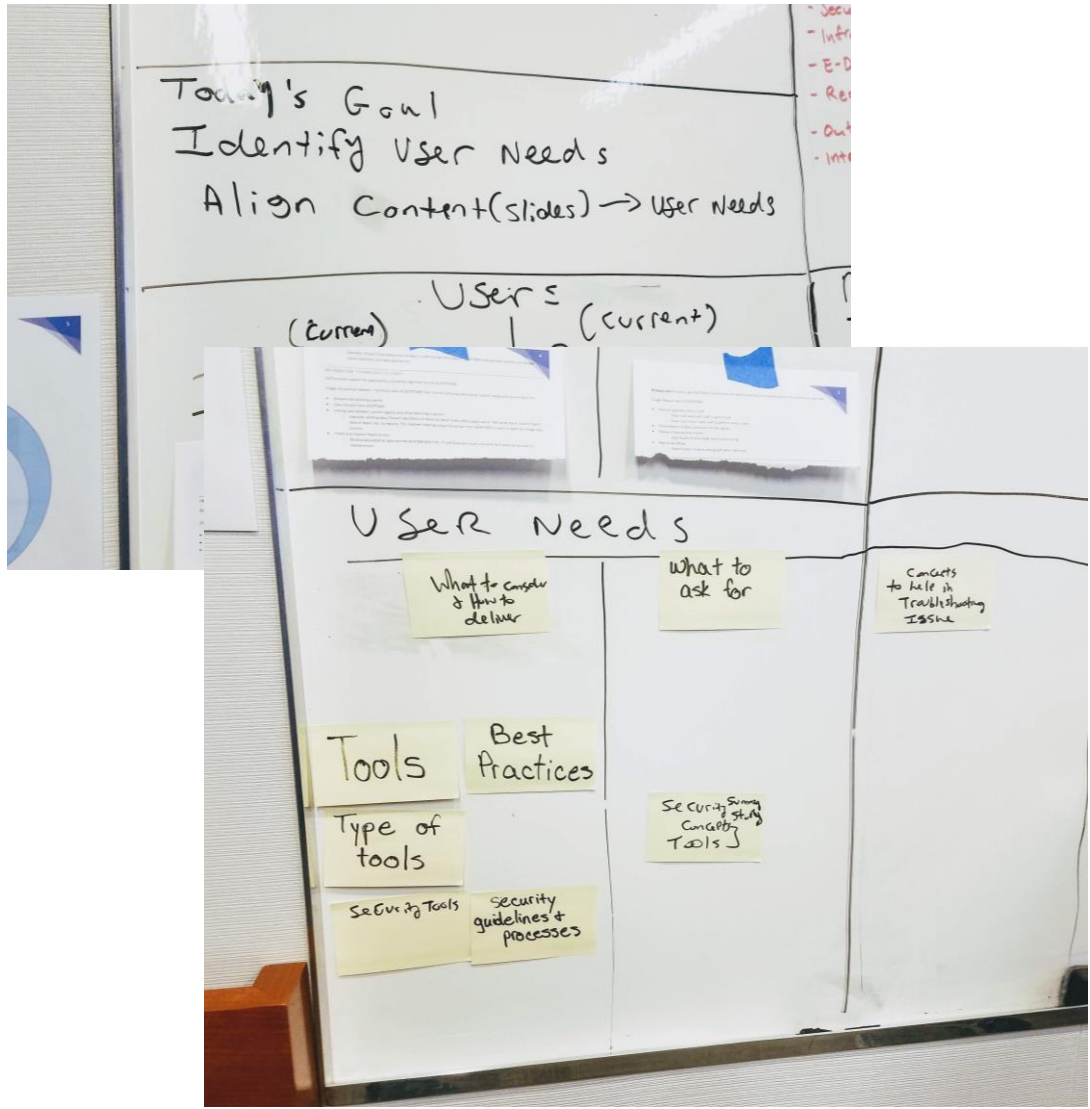
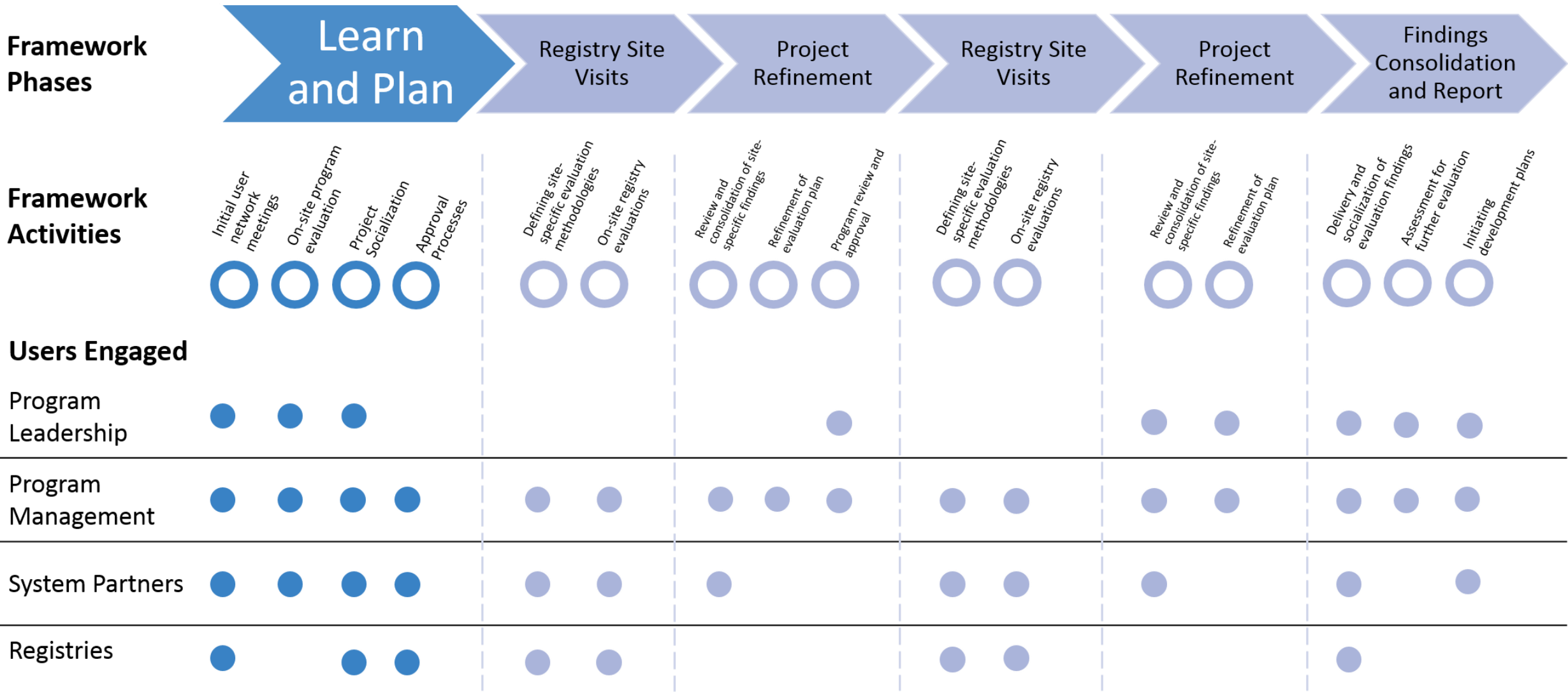
FIGURE 2.4. Specific anatomy of subjectivist studies.

Source: Friedman, C. and Wyatt, J. *Evaluation Methods in Biomedical Informatics*

2016-2017

# Usability Framework

- The complexity of both the system and the network of registry users required the development of usability framework.
- The framework was meant to ensure full user engagement during usability assessment and to minimize disruptions during the evaluation and subsequent system changes

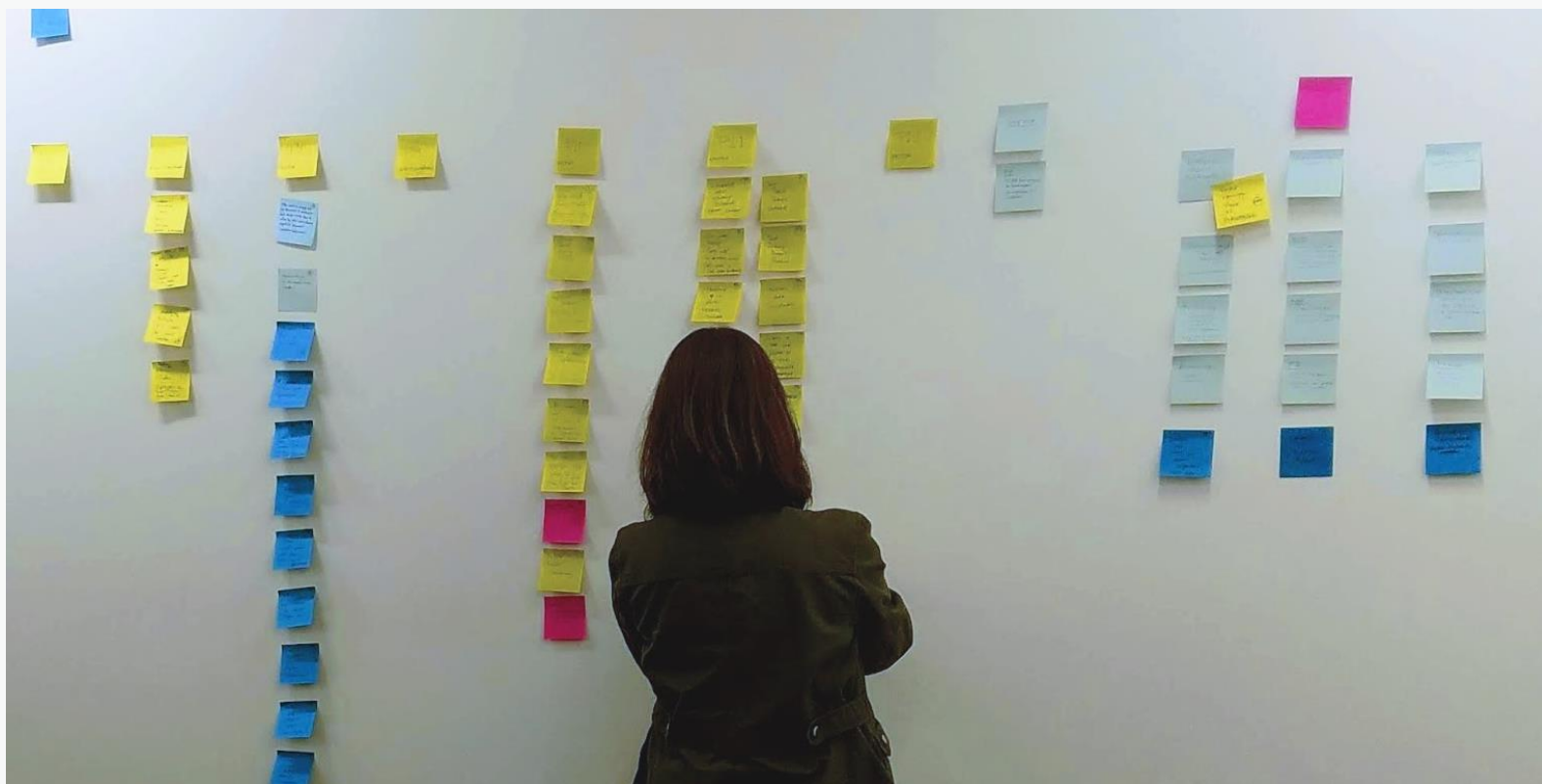




# Field Studies

2018

- June and July, 2018. NN/g and Westat conducted field studies via site visits to two SEER\*DMS registries, Georgia and Seattle.
- Findings from the 2018 site visits were presented in the SEER\*DMS Face to Face Meeting (September, 2018)



# Implementation

2019

- The usability project team (NCI, NN/g, Westat, IMS) identified a list of changes for Phase 1 of the project.
- IMS implemented the changes on a limited basis – the Patient Set Editor for one registry.
- NN/g conducted remote testing of the initial prototype with staff from the Utah Cancer Registry
- Changes were defined based on the UCR tests
- IMS implemented the new design system-wide
- IMS added a feature that allows users to toggle between the new and old interface

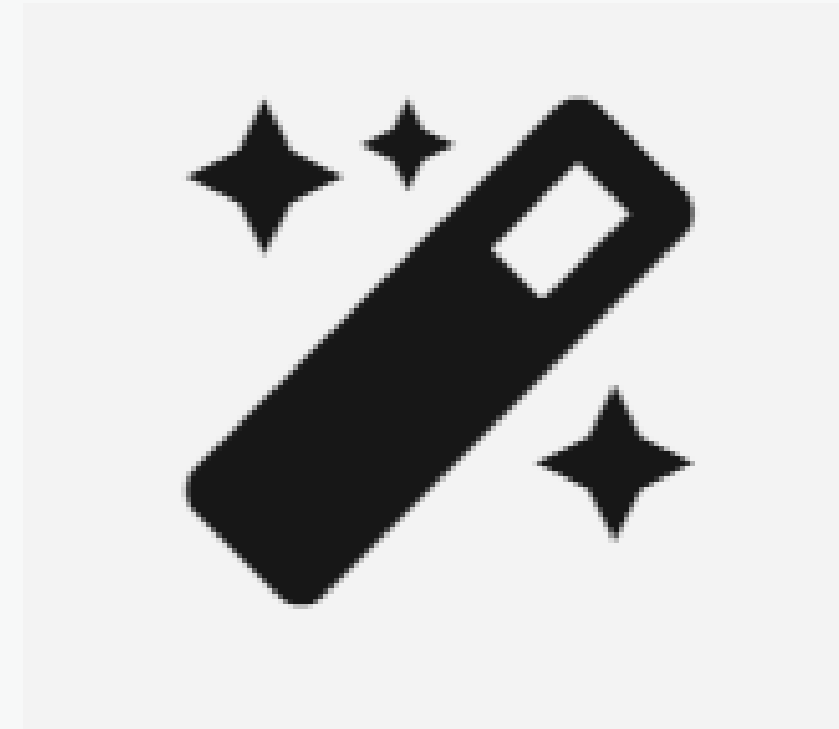
The screenshot displays the SEER\*DMS UCR Patient Set Editor interface. The main window is titled "PAT-0000001" and contains several sections:

- Demographics:** Patient Name: HENSLEY, SKY EMILIE; DOB: 11-12-1933; Site: C343-1; DOL: 07-24-2017; State DX: UT; SSN: 399-43-3893; Morph: 8070/3; VS: Alive; SEER: Yes; Race: White; Sex: Female; DX Date: 07-24-2017; Rpt Src: Hospital Inpatient/Clinic; NPCR: Yes; Local: Yes.
- Diagnosis:** Visual Editing: 1; Tumor Rec#: 01; Restricted: 0; Out of State: 0; Edit Over-ride: 0 (highlighted in red with "Failing Edit" text); Rept VA: 0; Rept DOD: 0; Rept OSDE: 1; Rept Other: 1; DX Date: 07/24/2017 (highlighted in red with "Failing Edit" text); SEER Rpt: 1; Non-Rpt Reason: ; Central Seq#: 00 (highlighted in red with "Failing Edit" text); Auto Seq: ; Local Rpt: 1; Non-Rpt Reason: ; DX Conf: 1; Rpt Src: 1; Initial Src: ; NPCR Rpt: 1; Non-Rpt Reason: ; Place DX: ; Dt First Found: ; Fac First Found: ; Multi Cnt: 99; Multi Dt: 07/24/2017; Multi as 1: 99; Ambig DX: ; Conclvs Dt: ; #Tum/Hist: ; Cancer Stat: ; Marital DX: 1; Age DX: 83; Payer DX: 99; CF Source: 99; ICD-O-3 (2001+): ;
- Supporting Data:** Alerts: 1; Text: 5; Cmt: ; Display Text From: CTC 00 (C343-1) - Record and CTC Text Fields; Hide non-values: ; Lock: ; Group Text By: Record; Included Record Types: All; Hide All: ; CTC 00 (C343-1); Site Title: RLL; Hist Title: SCCA; Remarks: Family Hx: Mother w/ Breast Cancer, Sister w/ Ukn Malignancy; This document is a summarized, interim companion to the findings reports for the 2018 usability study registry visits. This is intended as a quick, informal summary of key recommendations for changes make to SEER\*DMS, specifically for the purposes of assessing possible prototyping and research efforts for the SEER\*DMS Face-to-Face in September 2018. For more detail on both the evidence and findings that propelled these recommendations, and further specific detail on the recommendations themselves, please see the findings report entitled "NCI SEER\*DMS GA Registry Site Visit: Findings from Contextual Inquiry Sessions June 5-7, 2018"; Facility Name Long Enough to See Wrapping NA; 07-24-2017 C343-9 8070/3; DX Proc PE: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Gravidarum quisque non tellus orci ac auctor. Nec ultrices dui sapienget mi proin sed. Faucibus pellentesque sit amet. Ultrices tincidunt arcu non sodales. Porttitor lacus luctus accumsan tortorposuere ac ut consequat semper. Aliquet nec ullamcorper sit ametris nullam eget felis. Vestibulum mattis ullamcorper velit sed ullamcorper. Diam vulputate ut pharetra sit amet aliquam id. In nisi nisi scelerisque eu ultrices vitae. Pharetra et ultrices neque ornare aenean euismod elementum. Orci nulla pellentesque dignissim enim. Massa placerat dui ultrices lacus sed turpis tincidunt id aliquet. Pellentesque adipiscing commodo est at imperdiet. Nibh tellus molestie nunc non blandit massa. Id cursus metus aliquam eleifend mi in nulla posuere sollicitudin. Ultricies mi eget mauris pharetra et. Adipscint tristique risus nec feugiat in.

2020

# SEER\*DMS Usability Project: Phase 1 changes are live !!

- Today is the first official day of the transition!
- All users can use the “magic wand” to go back and forth between the new and old UX.
- IMS will collect feedback from the registries (details to be discussed today).
- The new UX will become the system default on March 9<sup>th</sup>. Users will still be able to toggle back and forth.
- The old UX will be disabled in April.

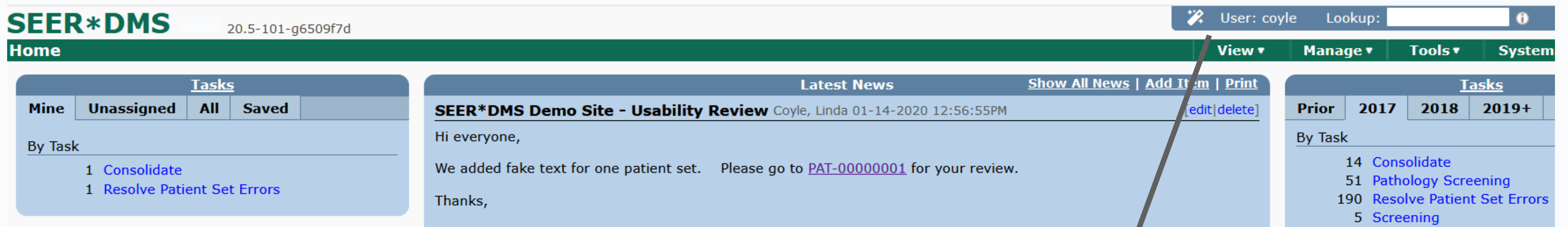


***P.S. Apologies to path screeners and match makers. The changes were not deployed – please wait a week before using the system for Match and Path Screening tasks.***



# SEER\*DMS Toggle Feature (the “Magic Wand”)

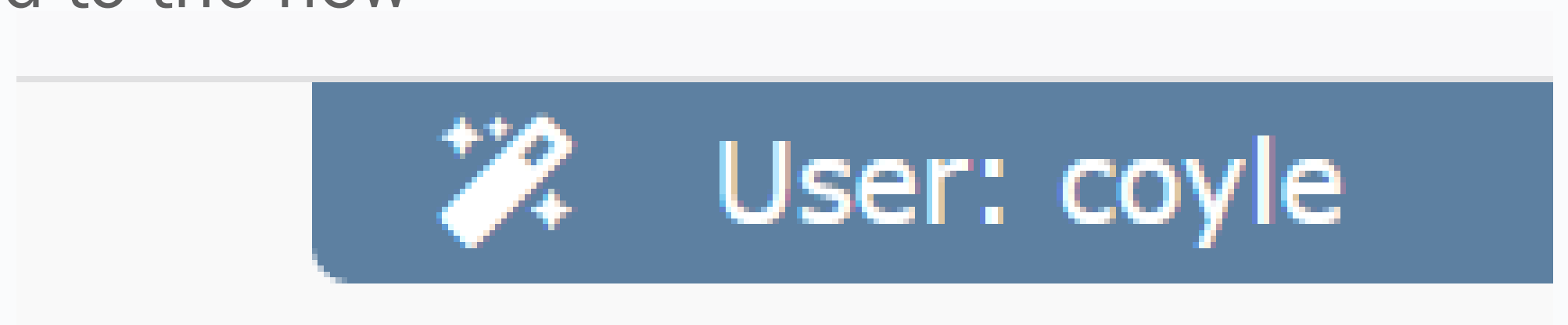
This shows the home page of SEER\*DMS Demo



The screenshot shows the SEER\*DMS home page. At the top left is the logo "SEER\*DMS" and the version number "20.5-101-g6509f7d". At the top right is a user profile bar showing "User: coyle" and a "Lookup:" field. Below the logo is a "Home" button. To the right of "Home" are menu items: "View", "Manage", "Tools", and "System". A "Wand" icon is located to the left of the "User: coyle" text. Below the toolbar are three main sections: "Tasks", "Latest News", and another "Tasks" section. The "Tasks" section on the left has tabs for "Mine", "Unassigned", "All", and "Saved", and lists tasks like "Consolidate" and "Resolve Patient Set Errors". The "Latest News" section contains a message about a usability review. The "Tasks" section on the right shows a table of tasks by year and priority.

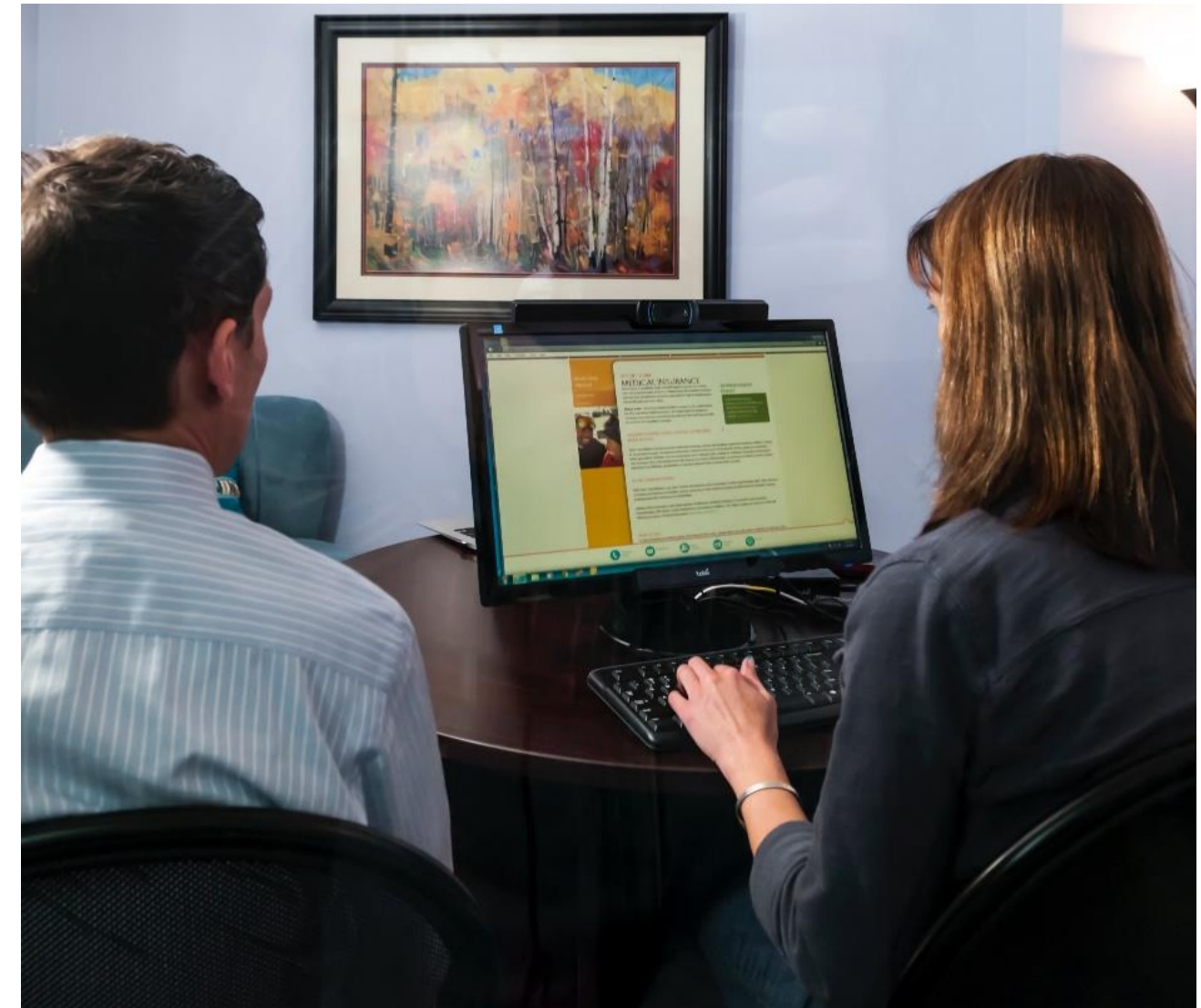
Prior	2017	2018	2019+
By Task			
	14		
	51		
	190		
	5		

A “Wand” icon was added to the toolbar. If the Wand is available, the user can toggle from the old to the new user interface.





# Behavioral Evidence- Based Usability Improvements to SEER\*DMS



**PAT-00000001**

Save Validate Cancel

Demographics

CTC 00 (07-17 C343-1)

Staging

Facility (1000)

Course 1

TX 1 (1000)

Abstract Facility Leads (1)

Audit Log (21)

Follow-back (0)

**Consolidated (1)**

Facility Name Long Enough to See Wrapping (1)

Demo Info | DX Info | Text **PAT-00000001** View Source Data

Name: HENSLEY, SKY EMILIE  
 DOB: 11-12-1933 Site: C343-1 DOLC: 07-24-2017 State DX: UT  
 SSN: 399-43-3893 Morph: 8070/3 VS: Alive SEER: Yes  
 Race: White Seq: 00 Rpt Src: Hospital Inpatient/Clinic NPCR: Yes  
 Sex: Female DX Date: 07-24-2017 Local: Yes

**CTC 00** Hide All

Diagnosis ▲

Visual Editing Tumor Rec# Restricted Out of State Edit Over-ride

1 01 0  0 Failing Edit

Rept VA Rept DOD Rept OSDE Rept Other

0 0  1

DX Date SEER Rpt Non-Rpt Reason

07 24 2017 1

Failing Edit

Central Seq# Auto Seq Local Rpt Non-Rpt Reason

00  1

Failing Edit

DX Conf Rpt Src Initial Src NPCR Rpt Non-Rpt Reason

1 1  1

Place DX

Dt First Found Fac First Found

Multi Cntr Multi Dt Multi as 1 Ambig DX Conclsv Dt #Tum/Hist

99 07 24 2017 99

Cancer Stat Marital DX Age DX Payer DX CF Source

1 83 99 99

ICD-O-3 (2001+)

Supporting Data

Alerts 1 Text Edits 5 Cmt

Display Text From

CTC 00 (C343-1) - Record and CTC Text Fields  Hide non-values  Lock

Group Text By Included Record Types

Record All Hide All

CTC 00 (C343-1)

Site Title  
RLL

Hist Title  
SCCA

Remarks  
Family Hx: Mother w/ Breast Cancer . Sister w/ Ukn Malignancy

This document is a summarized, interim companion to the findings reports for the 2018 usability study registry visits. This is intended as a quick, informal summary of key recommendations for changes make to SEER\*DMS, specifically for the purposes of assessing possible prototyping and research efforts for the SEER\*DMS Face-to-Face in September 2018.

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Facility Name Long Enough to See Wrapping NA i

07-24-2017 C343-9 8070/3

**DX Proc PE**  
 Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Gravidarutrum quisque non tellus orci ac auctor. Nec ultrices dui sapieneget mi proin sed. Faucibus a pellentesque sit amet. Ultrices tincidunt arcu non sodales. Porttitor lacus luctus accumsan tortorposuere ac ut consequat semper. Aliquet nec ullamcorper sit ametrisus nullam eget felis. Vestibulum mattis ullamcorper velit sed ullamcorper. Diam vulputate ut pharetra sit amet aliquam id. In nisl nisi scelerisque eu ultrices vitae. Pharetra et ultrices neque ornare aenean euismod elementum. Orci nulla pellentesque dignissim enim. Massa placerat dui ultricies lacus sed turpis tincidunt id aliquet. Pellentesque adipiscing commodo elit at imperdiet. Nibh tellus molestie nunc non blandit massa. Id cursus metus aliquam eleifend mi in nulla posuere sollicitudin.

Ultricies mi eget mauris pharetra et. Adipiscing tristique risus nec feugiat in.

# Readability

1

CTC 00 (C343-1) - Record and CTC Text Fields  Hide non-values  Lock Hide All

By Record

**CTC 00 (C343-1)**

**Site Title**  
RLL

**Hist Title**  
SCCA

**Remarks**  
Family Hx: Mother w/ Breast **Cancer**. Sister w/ Ukn **Malignancy**

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Supporting Data

Alerts 1 **Text** Edits 4 Cmt

Display Text From  
CTC 00 (C343-1) - Record and CTC Text Fields  Hide non-values  Lock

Group Text By  Included Record Types  Hide All

Record  All

2

**CTC 00 (C343-1)**

**Site Title**  
RLL

**Hist Title**  
SCCA

**Remarks**  
Family Hx: Mother w/ Breast **Cancer**. Sister w/ Ukn **Malignancy**

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# Scanning in SEER\*DMS

**Demographics (PAT-0000008)** [View Source Data](#)

Name: DOE, JOHN X SSN: 529-37-7591 DOB: 04-09-1925 R: 01 S: 1 DOLC: 12-20-2017 VS: 1  
 Site: C619 Morph: 8140/3 Grade: 3 Seq: 00 DX Date: 01-23-2017 Rpt Src: 1 Reg: GA SEER: Yes NPCR: Yes LOCAL: Yes

**Demographics** Reviewed 0 Region GA

Pre Last DOE First JOHN M X Suf SSN 529377591  
 Maiden Medicare ID

**Aliases** add No Aliases

Birth State RI Country USA Birth Place Birth Dt 04 09 1925 Sex 1 OR Name/Sex  
 Race 01 88 88 88 88 Hispanic 0 Race Coding Sys Curr 7 Race Coding Sys Orig 7  
 NAPIIA 01 Cmptd Eth 2 Cmptd Eth Src 2 NHIA 0 IHS IHS 2004 Race Reviewed

**Patient Addresses** add Reviewed 1

**Current Address** [view geocoder results](#)

Num 2911 Dir Street CASSIAR Type AVE Dir  
 Suppl  
 City UNION CITY State GA Zip 30291 Cnty Code 121 Country USA  
 Comment Addr Date

**Follow-up** AFUP Flag 0

DOLC 12 20 2017 Vital Status 1 FU Src Cntl 39 SSA Stat LexisNexis ID  
 Lst FU Phys  
 Lst FU Hosp FAC-100000 Registry facility

**Death Certificate & Causes Of Death**

DC File# Autopsy 0 Death State Death Country Place Death  
 COD 0000 COD Rev# 0 NDI  
 Oth COD  
 Contrib Cond

**Patient Contact Information**

Do Not Contact 0 Do Not Contact Reason Do Not Contact Date  
 Comment  
 Phone1 Comment1 Email1  
 Phone2 Comment2 Email2  
 Phone3 Comment3

**Informants** add No Informants

**Demographics (PAT-0000001)** [View Source Data](#)

Name: HENSLEY, SKY EMILIE  
 DOB: 11-12-1933 Site: C343-1 DOLC: 07-24-2017 State DX: UT  
 SSN: 399-43-3893 Morph: 8070/3 VS: Alive SEER: Yes  
 Race: White Seq: 00 Rpt Src: Hospital Inpatient/Clinic NPCR: Yes  
 Sex: Female DX Date: 07-24-2017 Local: Yes

**Demographics** [Hide All](#)

**Patient Identifiers & Flags**

Reviewed 0

Last HENSLEY First SKY M EMILIE Suf SSN 399433893  
 Maiden Cur Marital 1 Drivers Lic# DC SSN Medicare ID  
 Birth State AR Country USA Birth Place Birth Dt 11 12 1933 Sex 2 OR Name/Sex  
 Race 01 88 88 88 88 Hispanic 0 Race Rev  
 Race Cod Curr 7 Race Cod Orig 7 NAPIIA 01 Comp Eth 3 Comp Eth Src 2 NHIA 0 IHS  
 UPDB UPDB Reject Rsn UPDB SSN  
 Aliases (0) add  
 Follow-up, Vital Status & Death Data  
 Patient Contact Information  
 Patient Addresses (1) add  
 Informants (0) add



# Alerts and Data Review in SEER\*DMS

**Demo Info | DX Info | Text** **CTC (PAT-00000578)** [View Source Data](#)

Name: WALLACE, JOVANI JAMISON SSN: 152-15-5354 DOB: 02-13-1927 R: 01 S: 1 DOLC: 12-29-2017 VS: 1  
Site: 8888-9 Morph: 8140/6 Seq: 11 DX Date: 13-24-2015 State: MD Rpt Src: 1 **SEER: No** LOCAL: No

**CTC 11**

Visual Editing  Tumor Rec# 01 Restricted  Edit Over-ride   
Rept VA  Rept DOD  Rept OSDE  Rept Other   
SEER Rpt  Non-Rpt Reason: \_\_\_\_\_  
Local Rpt  Non-Rpt Reason: \_\_\_\_\_

**Diagnosis**

DX Date 13 24 2015  
Central Seq# 11 Auto Seq 2  
DX Conf 1 Rpt Src 1  
Place DX: \_\_\_\_\_

(2001+)  
Site 8888 Paired, No Information  
Site Title: \_\_\_\_\_  
Hist 8140 Behav 6 Adenocarcinoma, metastatic, NOS

Grade Clin  Grade Path  Grade Post TX  Conv Rev

**Historic Site & Morphology Fields**

(1992-2017) Grade 9  
(2010-2013) Grade Path Val  Grade Path Sys   
ICD-O-2 (1992-2000) Hist  Behav  Conv Rev   
ICD-O-1(1973-1991) Site  Hist  Behav  Grade  Conv Rev

**Demo Info | DX Info | Text** **PAT-00000001** [View Source Data](#)

Name: HENSLEY, SKY EMILIE  
DOB: 11-12-1933 Site: C343-1 DOLC: 07-24-2017 State DX: UT  
SSN: 399-43-3893 Morph: 8070/3 VS: Alive SEER: Yes  
Race: White Seq: 00 Rpt Src: Hospital Inpatient/Clinic NPCR: Yes  
Sex: Female DX Date: 07-24-2017 Local: Yes

**CTC 00** [Hide All](#)

**Diagnosis** ▲

Visual Editing  Tumor Rec# 01 Restricted  Out of State  Edit Over-ride  Failing Edit  
Rept VA  Rept DOD  Rept OSDE  Rept Other

DX Date 07 24 2017 Failing Edit  
Central Seq# 00  
SEER Rpt 1 Non-Rpt Reason: \_\_\_\_\_  
Local Rpt 1 Non-Rpt Reason: \_\_\_\_\_  
DX Conf 1 Rpt Src 1 Initial Src  NPCR Rpt 1 Non-Rpt Reason: \_\_\_\_\_

Place DX: \_\_\_\_\_

Dt First Found  Fac First Found

Multi Cntr 99 Multi Dt 07 24 2017 Multi as 1 99 Ambig DX  Conclsv Dt  #Tum/Hist   
Cancer Stat Marital DX Age DX Payer DX CF Source

# Demo to Review Changes

# Collecting Registry Feedback

# Don't be shy....

- Use the magic wand!
  - Encourage all users to switch back and forth between the old and new UX.
  - Please use the next 2 months to adjust.
- We would like to receive **initial** feedback from you within 1 to 2 weeks (Feb 14).
  - Does not need to be comprehensive but should include any “show stoppers”.
  - Each registry can send a Word document to Linda Coyle via the SEER\*DMS File transfer. Screen shots are not required, but can be included. These files will not be shared with NCI, NN/g, or Westat.
- Each week – please use the new UX more and more.
- IMS will disable the old UX on April 1.



# Next Steps 2020

# SEER\*DMS - Possibilities for 2020

Changes being considered for phase 2:

- Default settings for section open/close (“chevron settings”)
- Re-design of the left navigation in the Patient Set Editor
- Re-design of the DX Info popup
- New design for the Rx/Tx Tab
- Support various monitor sizes (a more responsive interface)
- Comfy vs condensed modes for editing

# Questions ?