Data Quality Tools: SWOG Reports and CTSU Data Quality Portal

Phyllis Goodman, M.S. Coordinating Statistician Institution Performance SWOG Statistical Center







SWOG Reports for Quality

- Expectation Report
- Query Report
- Ineligible patients
- Patients in Follow-Up
- SWOG reports: We are always updating, revising let us know if you have ideas for additional reports or additional fields on current reports that could be helpful to you





Access to SWOG Reports: CRA Workbench on swog.org







Expectations: How SWOG communicates data requirements

- Required forms, reports, specimens
- Posted at the time the patient is registered
 - Baseline forms, specimens
 - Others with a defined due date known at the time of patient registration; post-baseline specimens, QoL forms, other forms
- Posted during protocol treatment and follow-up
 - Based on the follow-up timing for patient
 - Adverse events, treatment given, tumor assessment, new study-specific forms (S1802, S1614)
- Overdue follow-up
 - Need updated last contact date





Specimen Expectations – Example

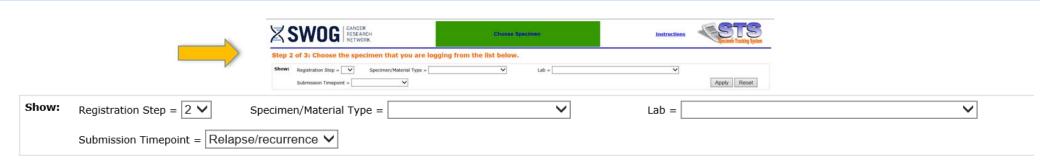
EXPECTATIONS

Filter Cr	iteria									
Show on	ly patient #	t: 703908		Show only stu	ıdy #: S1418		Show only in	nvestigator #: Disea	ise Type: - ALL - 🗸	
Show on	ly registrati	ions after:	(mm/dd/yyyy)	Show on	nly items due	*: O Before	O After (mm/dd/yyyy)	IPR: - ALL -	~
					*Within ເ	pcoming 90	days only			
						Apply	Reset			
									Export Report Data to	Excel
	_		Kaiser Perm NCC erm NCORP (CA1						3/21/2019 9:5	53:53 AM
Patno	Initials	Study	Investigator	RegDate	Last Contact Date	Status	Due Date	Expectation Qualifier	Days Overdue	IPR
703908	C,M	S1418-2	Birhan	11/15/2018	01/29/2019	Α	02/13/2019	RT breast form/Breast Radiation Therapy Form	36	
							04/19/2019	Blood submission/Green top tube, recurrence		
							04/19/2019	Blood submission/Red top tube, recurrence		
							04/19/2019	Tissue Submission/From recurrence/progression		





Specimen Tracking: Choose the Specimen



Study Number: S1418

Registration Step	Submission Timepoint	Specimen or Material Type			Material Requirements	Lab
2	Relapse/recurrence	Tissue from distant site	Blocks	Paraffin-embedded core biopsies	Only option	201 - SWOG Specimen Repository Columbus, OH
2	Relapse/recurrence	Blood	Whole Blood	Red top tube, 5 ml whole blood	Only option	201 - SWOG Specimen Repository Columbus, OH
2	Relapse/recurrence	Blood	Whole Blood	Green top tube, 5 ml whole blood	Only option	201 - SWOG Specimen Repository Columbus, OH

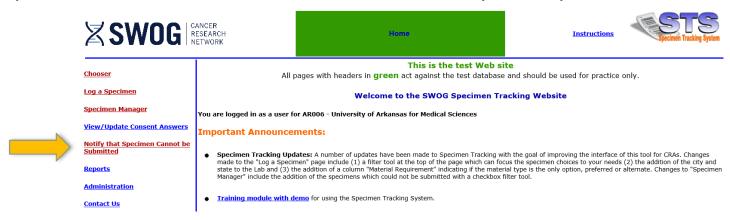
2	Week 55	Blood	Whole Blood	BAHO Lavender top tube, 7.5 ml peripheral blood	Only option	159 - NRG Serum Bank at Baylor College of Med Houston, TX
2	Month 18	Blood	Whole Blood	BAHO Lavender top tube, 7.5 ml peripheral blood	Only option	159 - NRG Serum Bank at Baylor College of Med Houston, TX
2	Baseline	Blood	Whole Blood	Green top tube, 5 ml whole blood	Only option	201 - SWOG Specimen Repository Columbus, OH
2	Week 13	Blood	Whole Blood	Green top tube, 5 ml whole blood	Only option	201 - SWOG Specimen Repository Columbus, OH
20		2.0			24 42	201 - SWOG Specimen Repository





Notes on specimens

Specimens that can't be submitted → "Notify that Specimen Cannot be Submitted"



- If a specimen isn't logged, the expectation won't get resolved even if it has been received by the biorepository
 - → Log the specimen retroactively
- If a specimen was logged in but the wrong type of specimen was chosen
 - → Contact the Statistical Center





How SWOG Measures Data Quality?

- Institution Performance Review (IPR)
 - Statistics used to monitor an institution's compliance to data submission requirements
 - Are required forms being submitted?
 - SWOG Policy #33
- Categories of data updated November 2017
 - Baseline (Initial Forms Set)
 - Post-baseline forms submission
 - Vital status updates (Follow-up)
 - Specimen submission





IPR metrics – As of April 2, 2019

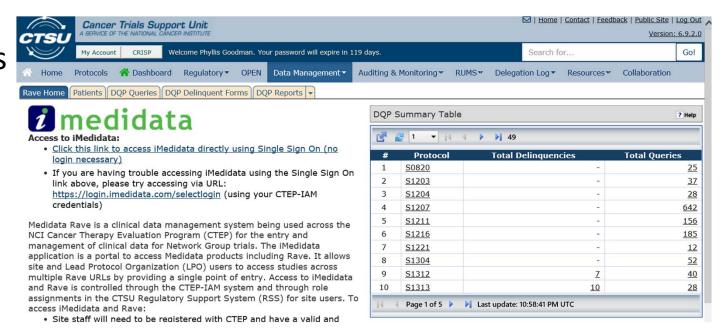
93 SWOG LAPS/Members/ NCORP sites	Initial Forms Set (IFS)	Post-Baseline Forms	Follow-Up	Post-Baseline Specimens
Compliance level	≤10% patient registrations overdue	≤5% forms overdue	≤15% patients overdue	≤10% specimens overdue
Mean % overdue	108/3150 (3.4%)	315/53,464 (0.6%)	485/9,405 (5.2%)	118/3,683 (3.2%)
Number of sites at 0% overdue	59	40	28	64
Total # of sites over the compliance level	4	1	5	5





What's new(ish) in the quality world?

- Data Quality Portal (DQP) on CTSU website
 - Overdue forms
 - Overdue queries







Expectation Report vs. DQP Delinquency Report

	Expectation Report	DQP
What's posted	Overdue and upcoming items due within next 90 days	Overdue forms only
Overdue definition	> 60 days from day expectation is due, doesn't take into account treatment delays	Based on target date + maximum treatment delay; overdue if > 15 days late
How to access	SWOG CRA Workbench; dynamic report updated in real time*	CTSU; updated nightly

^{*} Data submitted in Rave are applied to the SWOG database overnight.





Expectation Report vs. DQP Delinquency Report (continued)

	Expectation Report	DQP
Which studies	All Rave studies + all pre-Rave studies	Rave studies WITH calendaring*
What's included	Forms, specimens, anything else for which and expectation has been created	Forms, source document uploads and anything that has be calendared within Rave
On-study form	One form for older studies; newer studies may be > 1 form/expectation	May be more than one form
Specimens	Included	Not included
Source documents	One expectation for each type of source doc at a given timepoint	One form (with log lines) which includes all relevant source docs





DQP Delinquent Forms – As of April 15, 2019

Total delinquencies	< 15 days	15-30 days	31-60 days	61 – 90 days	>90 days
1534	597 (39%)	277 (18%)	243 (16%)	125 (8%)	292 (19%)

Form Type	Number of Delinquent Forms
Baseline	352
Quality of Life	52
Disease Assessment	385
Follow-Up	299
Other	446
Total	1534





Common Questions I Get

- How come I see XXX on the SWOG Expectation Report but it isn't overdue in Rave?
 - Form forced into Rave without updating appropriate data fields in SWOG database (e.g., last contact date)
 - QoL Coversheets that trigger roll out of forms in Rave not answered appropriately
 - Was QoL form complete?
 - Yes → Appropriate form rolls out in Rave; when completed and submitted, expectation resolves
 - No → Form doesn't roll our in Rave; expectation resolves
 - Blank → System query <u>but</u> if answered with text rather than Y/N, form doesn't roll out (so it won't look overdue in Rave), expectation doesn't get resolved
 - Source documents uploaded with the wrong "Type of Procedure"
 - Data point which triggered expectation resolution was amended
 - Not a calendared study



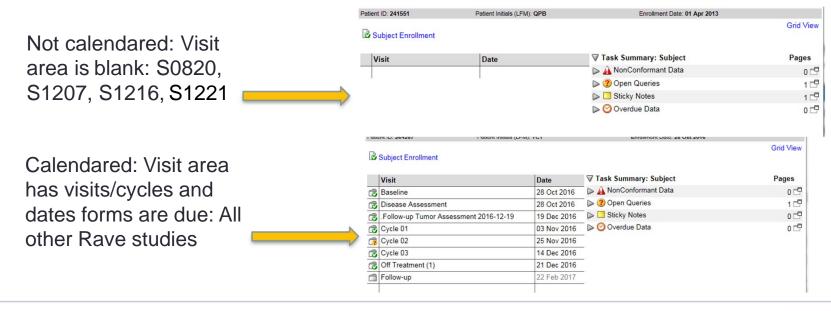




Not Calendared vs. Calendared

Calendaring – Rave function for defining when forms are due

- You will not see overdue forms on studies that aren't calendared
- You will still see outstanding queries regardless of calendaring







SWOG Query Report vs. DQP Queries

	SWOG Query Report	DQP Queries
Which studies	All Rave studies + all pre Rave studies	All Rave studies
What's included	Queries from Data Coordinators, Auditors/Monitors and Biorepository	Queries from Data Coordinators, Auditors/Monitors and Biorepository Medidata Rave System queries + non- conformant data
Overdue definition	Don't currently measure	Calculated from date posted; overdue if > 15 days since posted
How to access	SWOG CRA Workbench	CTSU





DQP Queries – As of April 15, 2019

Total queries	< 15 days	15-30 days	31-60 days	61 – 90 days	>90 days
3410	1265 (37%)	465 (13%)	493 (14%)	330 (10%)	857 (25%)

Query Type	Number
Site from System	1111
Site from DM (Stat Center Data Coordinators)	2238
Site from Monitor	2
Site from Specialist (Biorepository)	10
Non-conformant	49
Total	3410





DQP Comments

- Delinquent Forms
 - Complements our Expectation and IPR reports
 - If there are inconsistencies, work towards the SWOG reports as that is how site performance is currently measured
- Overdue queries
 - One missing lab value → multiple queries (value, units, ULN, LLN, sample collection date)
 - Partially completed forms
 missing data queries
 - "Ghost queries" query on a log line or form that was subsequently deleted
 → contact Statistical Center
- If you find an inconsistency, contact me
- We see DQP as a tool; we don't know NCI's long term plan for use





Thank you!







