Flight Tracker Consortium Meeting

June 2, 2021







CTSA Common Metrics Integration Ann Schwartz, University of Rochester What's New? Exclude Lists & Kaplan-Meier Curves What's Next? Office Hours with Rebecca & Scott



Careers Metric Pilot with Flight Tracker

CTSA Clinical & Translational Science Awards Program The University of Rochester Center for Leading Innovation and Collaboration (CLIC) is the coordinating center for the Clinical and Translational Science Awards (CTSA) Program, funded by the National Center for Advancing Translational Sciences (NCATS) at the National Institutes of Health (NIH), Grant U24TR002260.



New Reporting Software Application

- Built on REDCap forms
- Ease data entry burden



Program Results to Improve Strategic Management



Informatics Process

- Run script based on data model
 - CSV file created
- Data upload feature

Data Upload Feature	
Does your hub use any of these data models (PCORNet, OMOP, TriNetX, i2b2)?	⊕ ● Yes
Do you want to use the data upload feature?	⊛ ● Yes
Did your hub run one of the scripts from GitHub site and/or adapt one of the scripts?	(ii) ● Yes
s your data output in CSV format?	(ii) ● Yes
o you have direct access to the CSV file?	⊮ ● Yes ○ No reset
Choose a file to upload Choose File No file chosen	

CLIC Center for Leading Innovation & Collaboration

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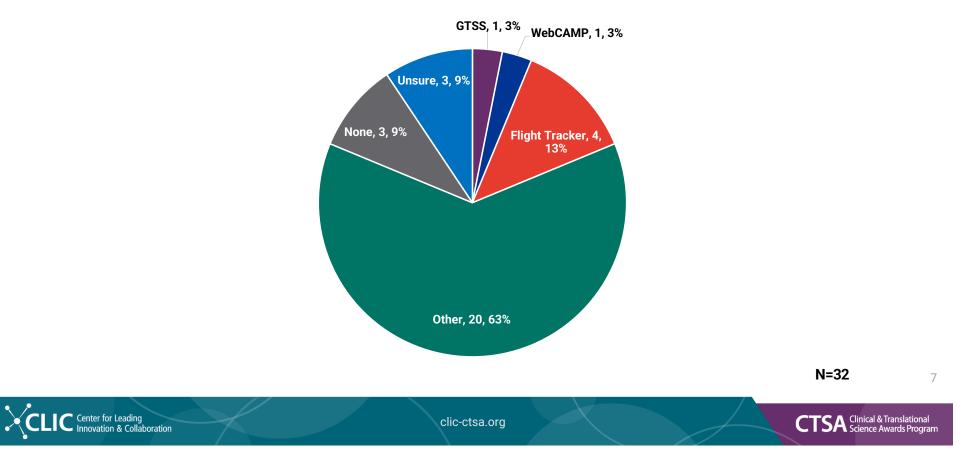
Could the Informatics process work with the Careers metric?



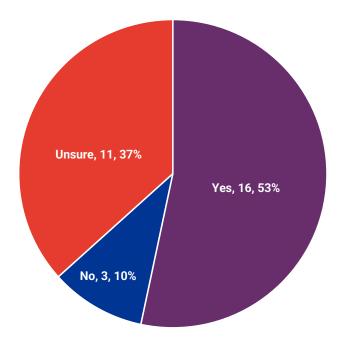
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What system is your hub using to track scholars & trainees?



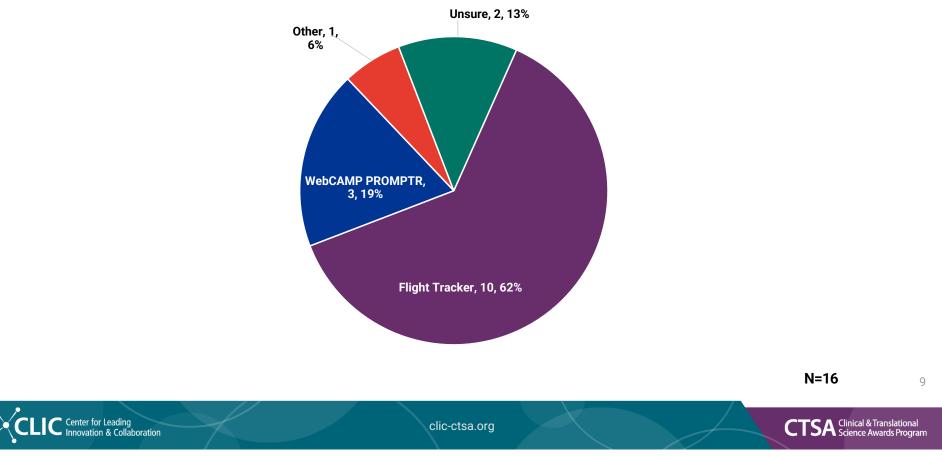
Does your hub intend to implement a scholar and/or trainee tracking system in the next 12 months?





N=30

Which system is your hub intending to implement in the next 12 months?



How can we use this information?



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Flight Tracker Pilot

- Use Flight Tracker to generate Career metric csv formatted output
- CLIC test uploading the data into CM-PRISM





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What's Next?

- If successful, test with other career tracking systems
 - WebCAMP PROMPTR
 - GTSS
 - Other
- Addition of CM-PRISM Upload button for Careers metric data
- Development of interface for "handshake" between tracking system and CM-PRISM



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Please share your thoughts



Are you interested in participating?



Contact ann_schwartz@urmc.rochester.edu



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CTSA Clinical & Translational Science Awards Program



Exclude Lists

- Several mismatches can occur:
 - A wrong name can be matched with a grant (e.g., Jane Smith)
 - A wrong name can be matched with a publications (e.g., Williams JC with John C. Williams)
 - A wrong ORCID identifier can be pulled in (e.g., 1010-1010-1010-1010)
- These mismatches often occur not just once but several times
- E.g., at Vanderbilt, mismatches in father/son combo Hal Moses and Harold Moses, Jr.





Exclude Lists

- Added new REDCap form with names to exclude for that record
- Added text boxes on Wranglers to supply information
- Can add more than one name/id by separating by commas

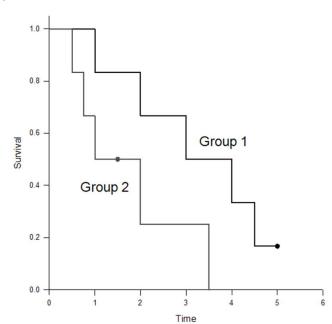
Publication Wrangler

This page is meant to confirm the association of publications with authors.



Kaplan-Meier Curves

- Good introduction to topic: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3932959/
- Graph of Survival Rate from beginning of study
- At each time, three outcomes:
 - Event (e.g., death, $K \rightarrow R$ conversion)
 - Censor (e.g., drop out of study, lose to follow up)
 - Continues on/lives
- Lose to follow up = no publishing/grant activity
- On graph, dot = censored



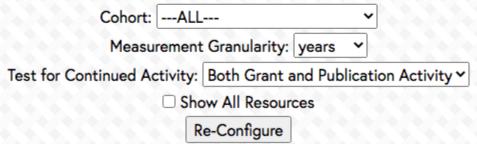
Survival Analysis



Kaplan-Meier Configuration

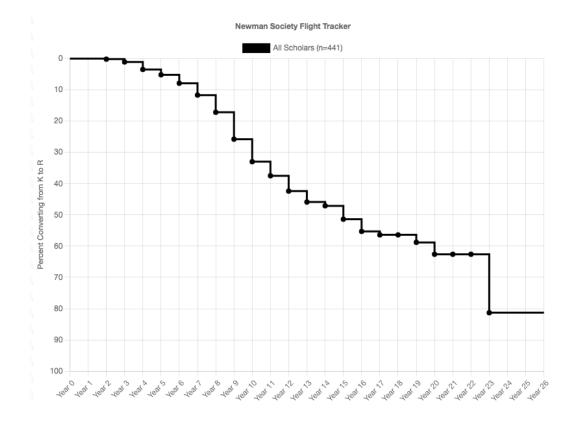
Kaplan-Meier Curve

A <u>Kaplan-Meier survival plot</u> is used in epidemiology to track deaths over time due to a disease. It's a good way to track the effectiveness of a treatment. In Career Development, deaths are not tracked, but rather whether someone converts from K to R (event), is lost to follow-up (censored), or is still active (censored). This curve will hopefully allow you to gauge the effectiveness of scholarship-promoting efforts.



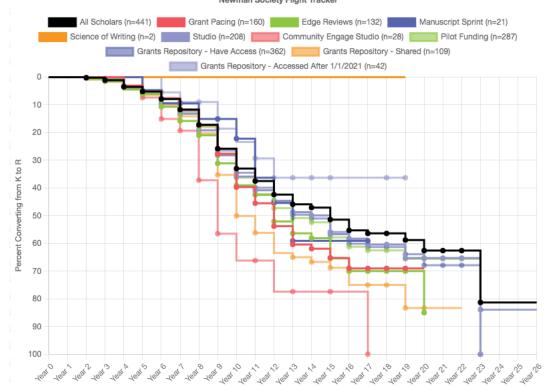


Kaplan-Meier Plot





Kaplan-Meier Plot



Newman Society Flight Tracker



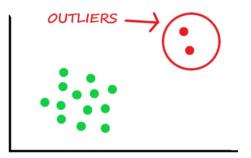
Kaplan-Meier Interpretation

- Different from previous meeting reversed axes
- Original convention: Cancer survival curves avoiding death as event
- Goal is to move $K \rightarrow R$ rate lower on the y-axis (reversed axis)
 - Conversion rate at last year represents overall conversion rate (percent converted minus those lost to follow up)
 - Some lines in our graphs can have everyone convert or drop out



Outlier Detection

- Kaplan-Meier curves can grow skewed due to outliers
- A group of outliers is defined as:
 - 1 grant or 1-3 publications
 - before 1990 (sensitive screen)
 - with a > 10-year gap before the next grant/publication (specific screen)
- E.g., found publications associated with a scholar dating back to 1825





Outliers Example

Found 1 Records with Outliers

A group of outliers is defined as 1 grant or 1-3 publications before 1990 with a > 10-year gap before the next grant/publication.

Record 14: Robert Barry

Grants

1988-01-28 (See Grant) 1F32EY006059-01 from nih_reporter Avoid Grant





Expected to be out this Friday in v3.3.0



Newbie Call

Just getting started with Flight Tracker?

There's a definite learning curve. Move up more quickly by joining June's Newbie call.

June 9 at 1pm Central Time

Leave your email in the chat to receive an invitation.

Office Hours with Rebecca & Scott



