Evaluation 101 for Practitioners

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EVALUATION 101 FOR PRACTITIONERS

What to Collect and How to Use it
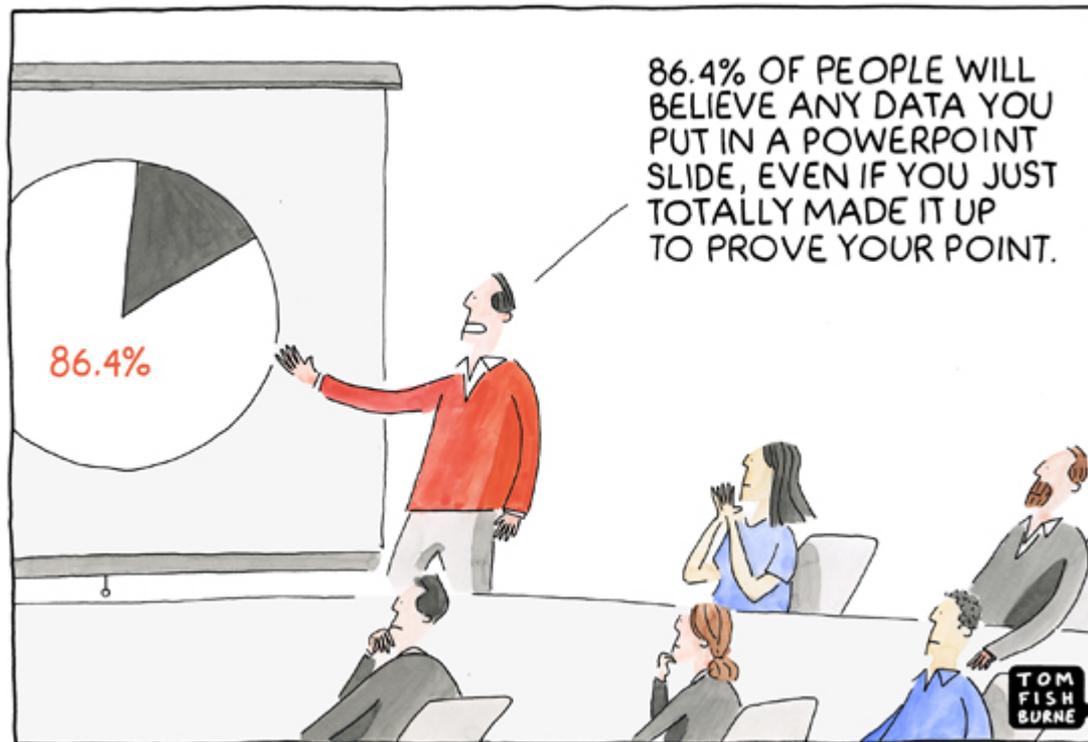
OVERVIEW

What's evaluation?

Data collection

Drowning in data

Tips and tricks

Questions

I WOULD RATHER _____ THEN LISTEN TO A PRESENTATION ABOUT RESEARCH AND EVALUATION/DATA

86.4%

86.4% OF PEOPLE WILL BELIEVE ANY DATA YOU PUT IN A POWERPOINT SLIDE, EVEN IF YOU JUST TOTALLY MADE IT UP TO PROVE YOUR POINT.

TOM FISH BURNE

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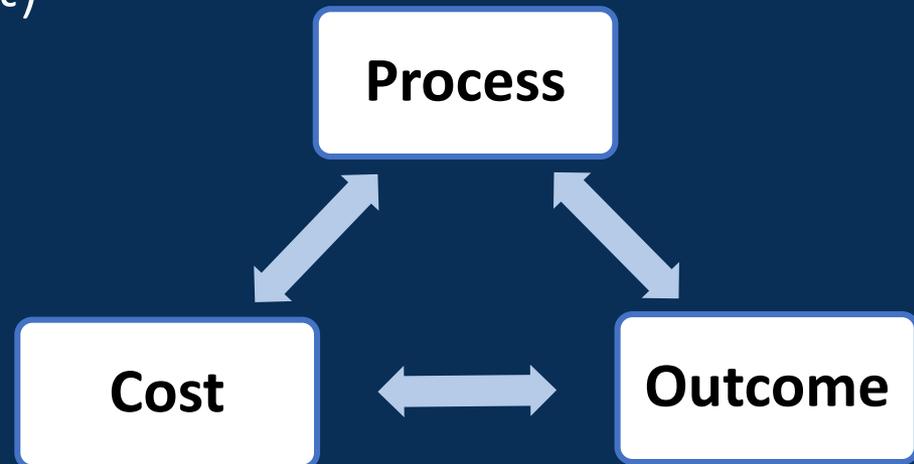
hope & fear

WHAT'S EVALUATION?

And why should I care?

WHAT'S EVALUATION?

Three main areas of evaluation:
- Process (program improvement)
- Outcome (impact)
- Cost (cost-benefit)

```
              ┌──────────┐
              │ Process  │
              └──────────┘
             ↙            ↘
┌────────┐                  ┌──────────┐
│  Cost  │ ←──────────────→ │ Outcome  │
└────────┘                  └──────────┘
```

COMMON RESEARCH QUESTIONS

Process

- Is the program maintaining model fidelity?

Outcomes

- Do programs reduce recidivism?
- Are participants successfully completing the program?

Cost

- What are the costs and savings of the program?

TYPES OF EVALUATION

	Formative	Summative
Who?	Typically Internal (you!)	Typically External
What?	Program service delivery	Program outcomes
When?	On-going	End of program*
Why?	Maintain fidelity & improve program	Demonstrate program effectiveness

WHY DO I CARE?

Possible Reductions in Recidivism

51%   **41%**

20%

No   **Yes**

Review Data
(n=38), p<.05

46%   **37%**

20%

No   **Yes**

Used Evaluation
(n=34), p<.10
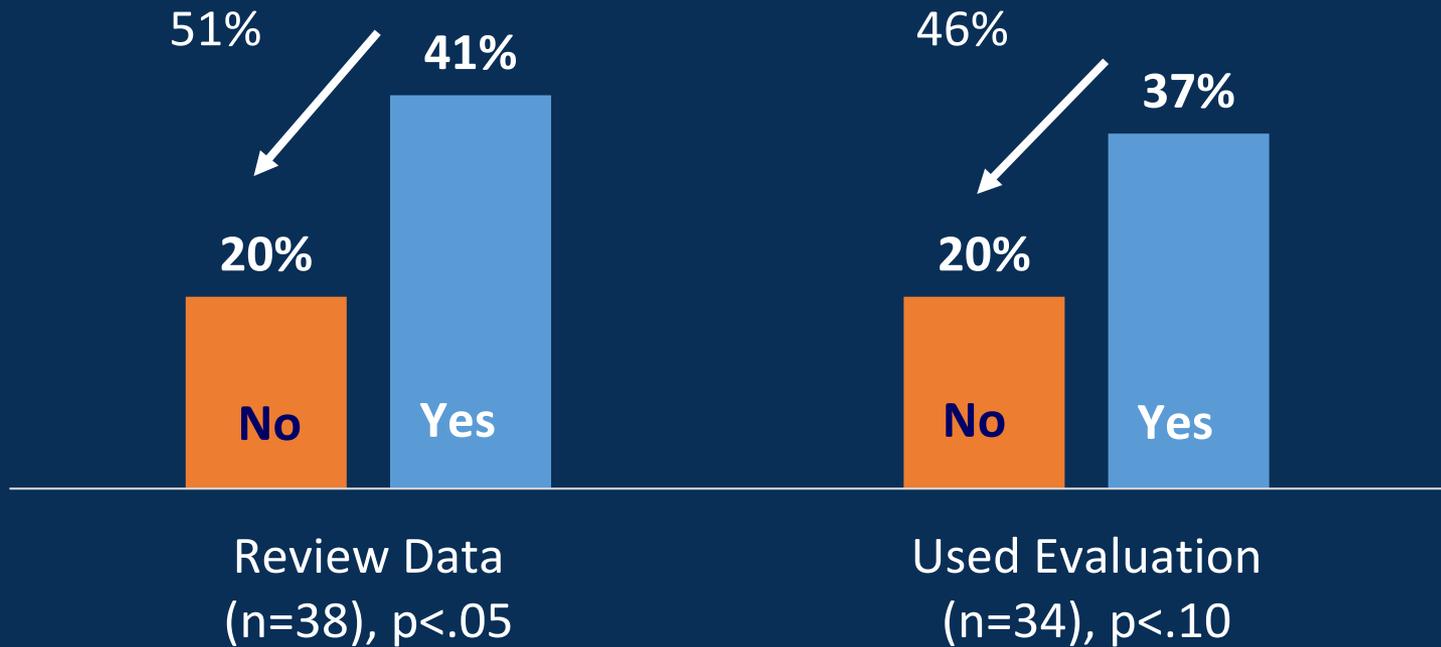
Carey, Finigan, & Pukstas (2008);
Carey, Mackin, & Finigan (2012)

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DATA COLLECTION

Everything you didn't know you needed

PROGRAM DATA

Participant List:

identifiers, demographics, referral info, program status, assessment info, social indicators, service needs, etc.

IMPORTANT INFO TO COLLECT

✓ Name

✓ Date of birth

✓ Gender

✓ Race/ethnicity

✓ Program entry/exit dates

✓ Program status

♥ Other unique IDs: SSN, SID, etc.

♥ Referral information (arrest date, court case number)

♥ Risk/needs scores

♥ Substances used

PROGRAM SERVICE DATA

Participant List

Drug Tests

Status Review Hearings

Incentives & Sanctions

Treatment
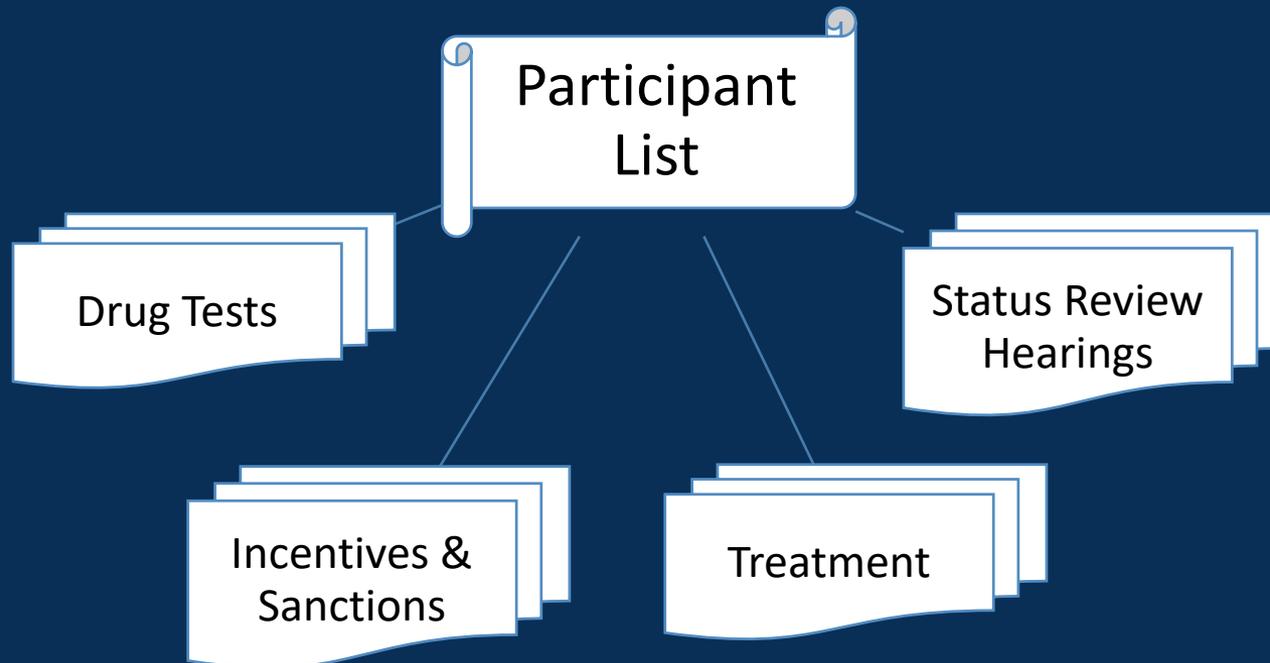
Status Review Hearings
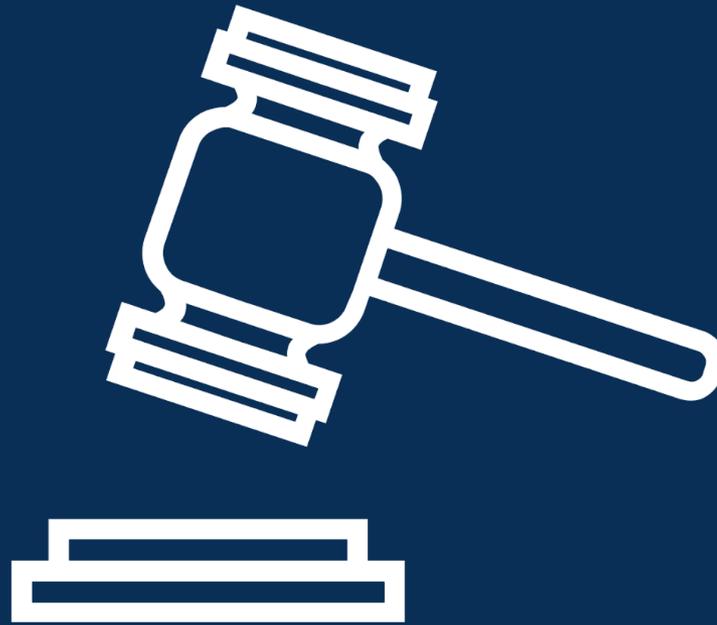
Status Review Hearings

File Structure

- Usually stacked on dates (multiple rows per person)

Necessary Info

- Dates of hearings

- Attendance

- Other descriptors (judge presiding, phase promotion, graduation, etc.)

Drug Tests

Drug Tests

File Structure
- Usually stacked on dates (multiple rows per person)

Necessary Info
- Dates of drug tests
- Drug test type: urine analysis, EtG, PBT, oral swab, bracelet, ignition interlock, blood test, hair, patch…
- Types of substance tested for
- Results of drug tests: negative, positive (including refused, diluted, and no-shows)

Incentives and Sanctions

INCENTIVES AND SANCTIONS

File Structure
- Usually stacked on dates (multiple rows per person)

Necessary Info
- Dates of rewards/sanctions
- Type*: rewards, sanctions, treatment responses
- Duration*: specifically for jail days (entry and exit date or number of days), community service hours, etc.

*As available

TREATMENT

TREATMENT

File Structure
- Usually stacked on treatment events/episodes (multiple rows per person)

Necessary Info
- Dates of treatment (or start & end dates)
- Duration of treatment
  - Could be days for inpatient/residential
  - Could be hours for outpatient appointments
- Type or modality
- Completion/discharge status
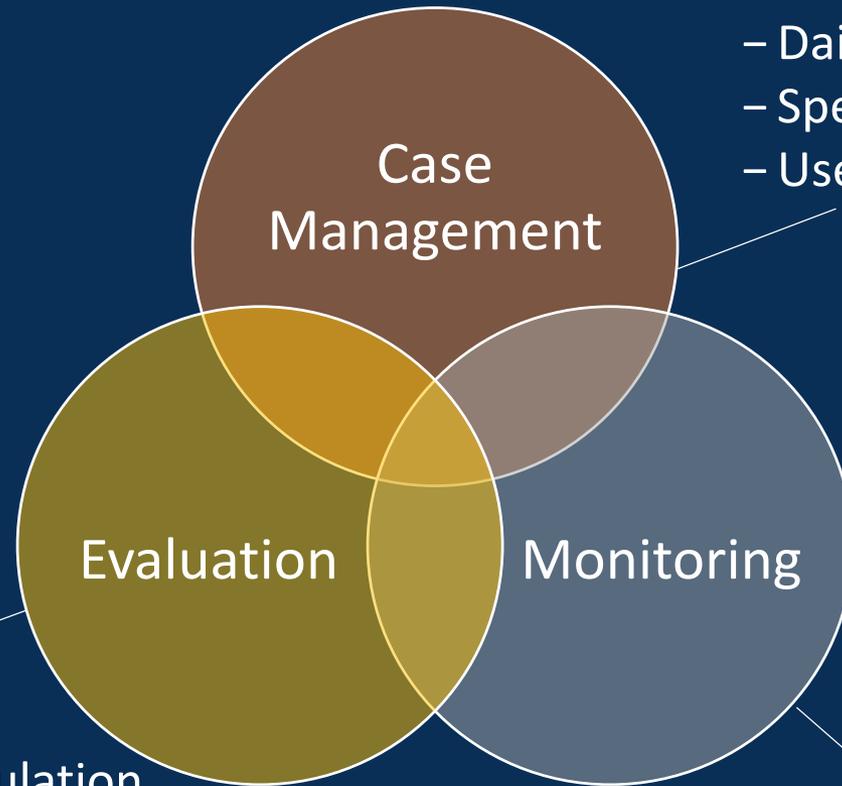
TREATMENT

Treatment Modalities
- Inpatient/residential
- Detox
- Transitional
- Group outpatient
- Individual outpatient
- Medication Assisted Therapy (MAT)
- Assessment, case management activities

Drowning in Data!

What to do with it?

What Do You Want to Know?

Case Management
- Daily
- Specific to individual
- Useful for case managers

Evaluation
- Periodic
- Entire program population
- Useful for policy makers

Monitoring
- Ongoing
- Current program population
- Useful for program managers

Case Management Examples

- Who is in Phase 1?
- Whose color came up for a drug test today?
- Who tested positive for drug use yesterday?
- Who missed a treatment session?
- Who complied with all program requirements for the past 2 weeks?

Monitoring Examples

- What is our program's graduation rate?
- What is different about those who graduate and those who don't?
- When in our process do participants struggle (and drop out)?
- Are participants receiving the services indicated by their assessment?
- How frequently are we administering incentives, sanctions, and treatment responses?

EVALUATION EXAMPLES

- Does our program reduce recidivism?
- Does our program reduce substance use?
- Does our program increase employment & education?
- Are families in the program reunified?
- What is the cost of program?
- Is our program maintaining fidelity to the drug court model?

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WHAT IS THE BEST WAY TO TRACK?

WHAT IS THE BEST WAY TO TRACK?

Case Management → Monitoring → Evaluation
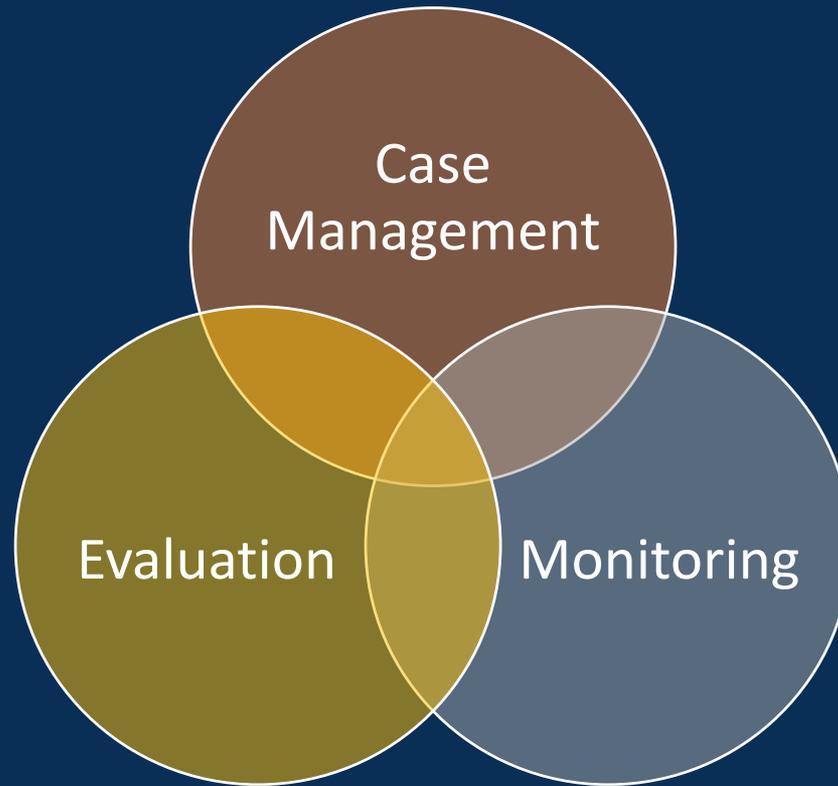
- Online database
- Offline database (e.g., Access database)
- Spreadsheets (e.g., Excel)

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	Online Database	**Offline Database**	**Spreadsheets (Excel)**
Automated Reports	✓	✓	✗
Easy Data Entry	✓	✓	✗
Multiple User Entry	✓	?	✗
Data Safeguards	✓	✓	?
Software Knowledge Required	✓	✓	?
Easy Sharing	?	?	✓
Cost	$$$	$$	$

CONSIDERATIONS IN CHOOSING DATABASE SYSTEMS

Modifications to Existing Open Source Systems or Development of a Fully Custom System

- o *Advantages:* The most substantial advantage of this approach may lie in reduced long-term cost, though upfront costs may be significantly higher. Another advantage is full customization without having to rely on an external vendor (assuming internal programming and maintenance capacity) for ongoing maintenance and support.

- o *Disadvantages:* It has been NPC's experience that what appear to be simple solutions sometimes become more complex in implementation. Furthermore, a locally-developed option requires internal IT infrastructure support. Complications typically require adjustments for which the County should, if this solution is selected, reserve substantial additional resources.

CONSIDERATIONS IN CHOOSING DATABASE SYSTEMS

Off-the-Shelf Systems

- There are several vendors providing court case management information systems. Some of these systems are developed by other jurisdictions and offered for a fee or even in the public domain. However, most systems are being marketed by private information technology firms. There are typically four types of costs associated with these privately-developed systems including initial purchase price, ongoing subscription fee, report modification fee, and data entry modification fees. NPC has identified seven systems that may be appropriate for the County to consider.
  - *Advantages:* Most off-the-shelf systems have a smoother, more attractive, and easier to navigate user interface. Technical support and tailoring is typically sophisticated and responsive to user needs and questions. Good off-the-shelf systems have been used and vetted in other drug courts in multiple jurisdictions so they contain all the data elements that should be collected by a program and have user-friendly functions in place that create efficiencies in data entry, support participant case management and facilitate electronic communication among team members who can access the system online.
  - *Disadvantages:* Some systems in the public domain are of inconsistent quality and come with no or very limited technical support. Those available upon subscription are typically expensive and require substantial on-going costs.

TIPS AND TRICKS

Data magic!

Data Collection Tips

- Pay special attention to accuracy of identifiers
- Use drop-down lists or lookup tables to make data entry faster and consistent
  - Don't spend time typing out the risk level each time, select from a list!
- Use data validation (restrictions)
  - Restricting the format on a date field can help eliminate data entry errors

DATA COLLECTION TIPS

If you must use Excel:

- Limit one data element per column
- Put participant characteristics and outcomes on one sheet
- Put treatment, services received, drug tests, incentives & sanctions, and other items that come in multiples on another sheet
- Use drop-downs (under data validation) to link the list of names on one sheet to the others

Excel Drop-Down Example

One sheet with participants:

Another with drug tests:

ANALYSIS TRICKS

Use the formula bar to calculate ages, referral time, and length in program

Calculate days:
=[End Date]-[Start Date]
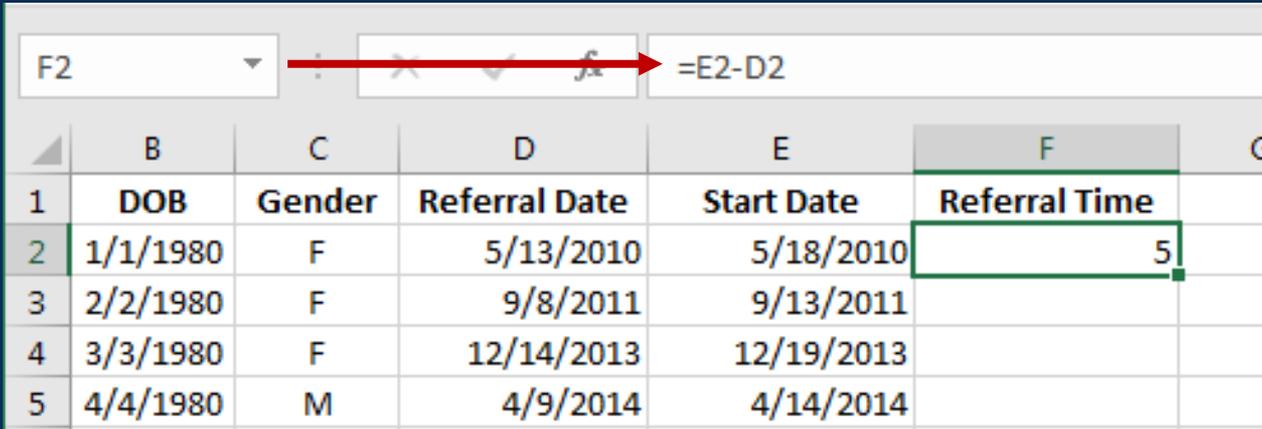
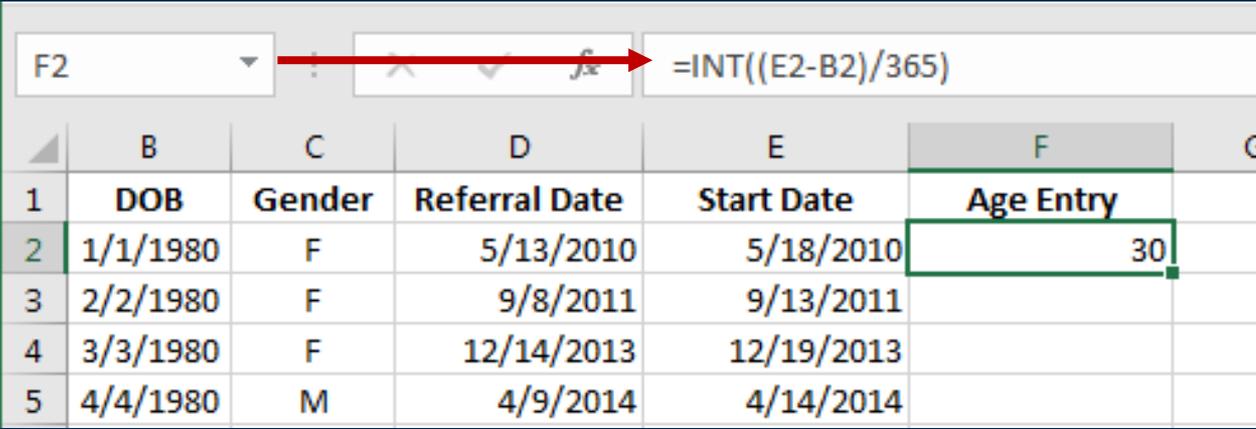| F2				f_x	=E2-D2	
	B	**C**	**D**	**E**	**F**	G
1	**DOB**	**Gender**	**Referral Date**	**Start Date**	**Referral Time**	
2	1/1/1980	F	5/13/2010	5/18/2010	5	
3	2/2/1980	F	9/8/2011	9/13/2011		
4	3/3/1980	F	12/14/2013	12/19/2013		
5	4/4/1980	M	4/9/2014	4/14/2014		

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ANALYSIS TRICKS

Use the formula bar to calculate ages, referral time, and length in program

Calculate years:
=INT(([End Date]-[Start Date])/365)

F2				fx	=INT((E2-B2)/365)	
	B	**C**	**D**	**E**	**F**	
1	**DOB**	**Gender**	**Referral Date**	**Start Date**	**Age Entry**	
2	1/1/1980	F	5/13/2010	5/18/2010	30	
3	2/2/1980	F	9/8/2011	9/13/2011		
4	3/3/1980	F	12/14/2013	12/19/2013		
5	4/4/1980	M	4/9/2014	4/14/2014		

ANALYSIS TRICKS

Filters:

OTHER USEFUL EXCEL FEATURES

Pivot Tables:

Finding an Evaluator

- AEA
- Local College/University
- Recognized experts (refereed journals etc.)

Questions?

Excel Resources

Using drop-down lists in Excel:

https://support.office.com/en-us/article/Create-a-drop-down-list-7693307a-59ef-400a-b769-c5402dce407b

Using pivot tables in Excel:

https://support.office.com/en-us/article/Create-a-PivotTable-to-analyze-worksheet-data-a9a84538-bfe9-40a9-a8e9-f99134456576

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