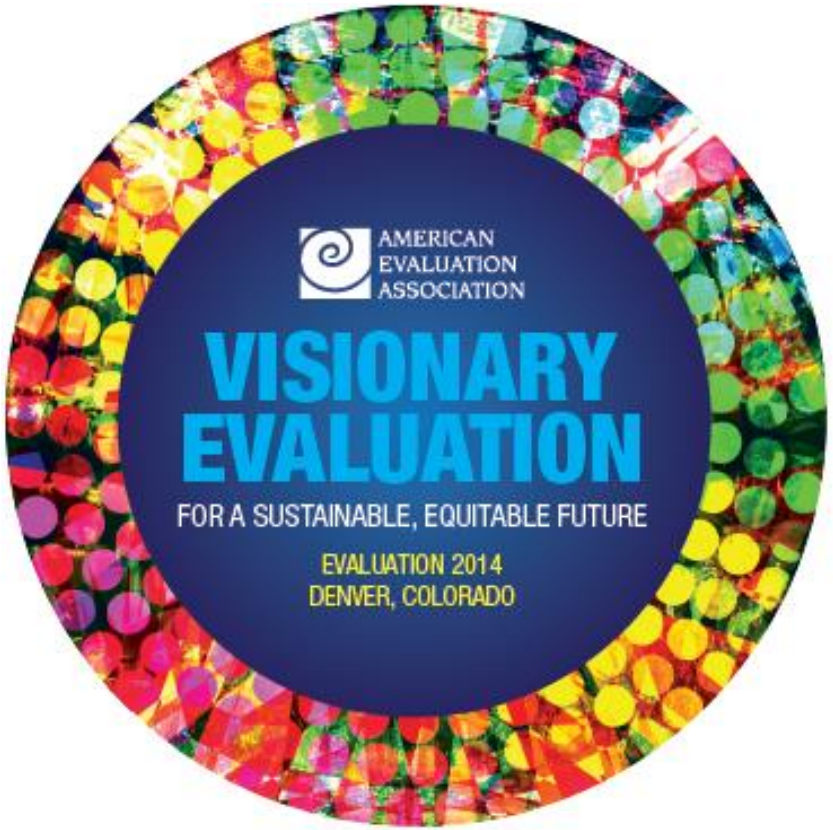
Stakeholder Engagement in Clinical Translational Science Award (CTSAs) Programs: Theory to Practice



Using design thinking to facilitate data collection and use among stakeholders

- Chithra Adams, John Nash, and Beth Rous

Considering organizational communication in program evaluation to improve process and outcomes

- Victoria Sherif and John Nash

Visionary evaluation: Designing an experience

Use

Use

Experience

The emotional content of a design brings it a human meaning. It is the basis upon which people experience a design as being truly meaningful in their lives.

- Boland & Collopy, 2004

“Emotions are, in essence, impulses to act”

- Norman Donald, 2004

Context:
Center for Clinical and Translational Science

Approaches:

Design Thinking
Organizational Communication

Design

Designer

Frank Gehry

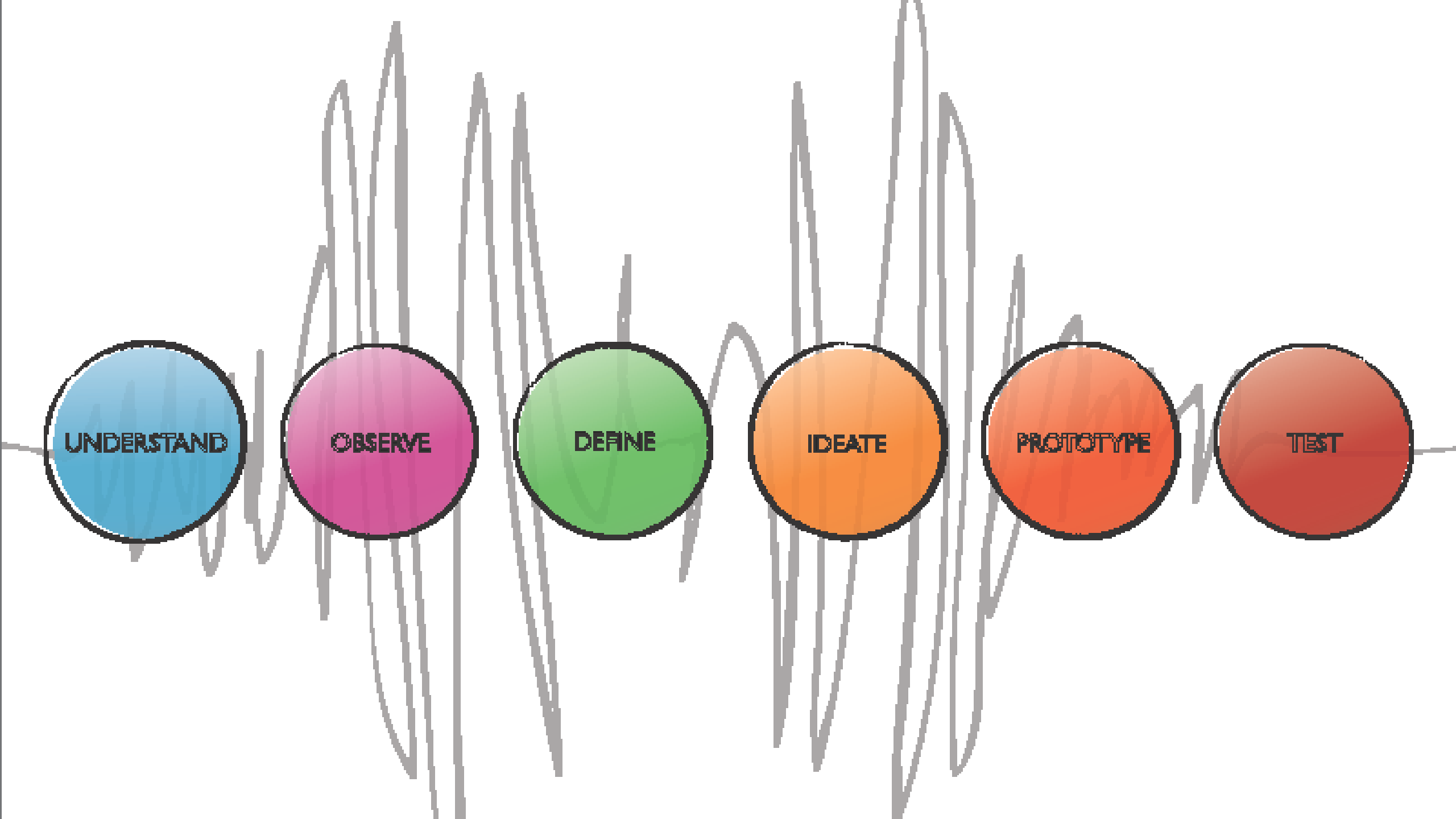
Thinking Like a Designer

emotions

reasoning

observations

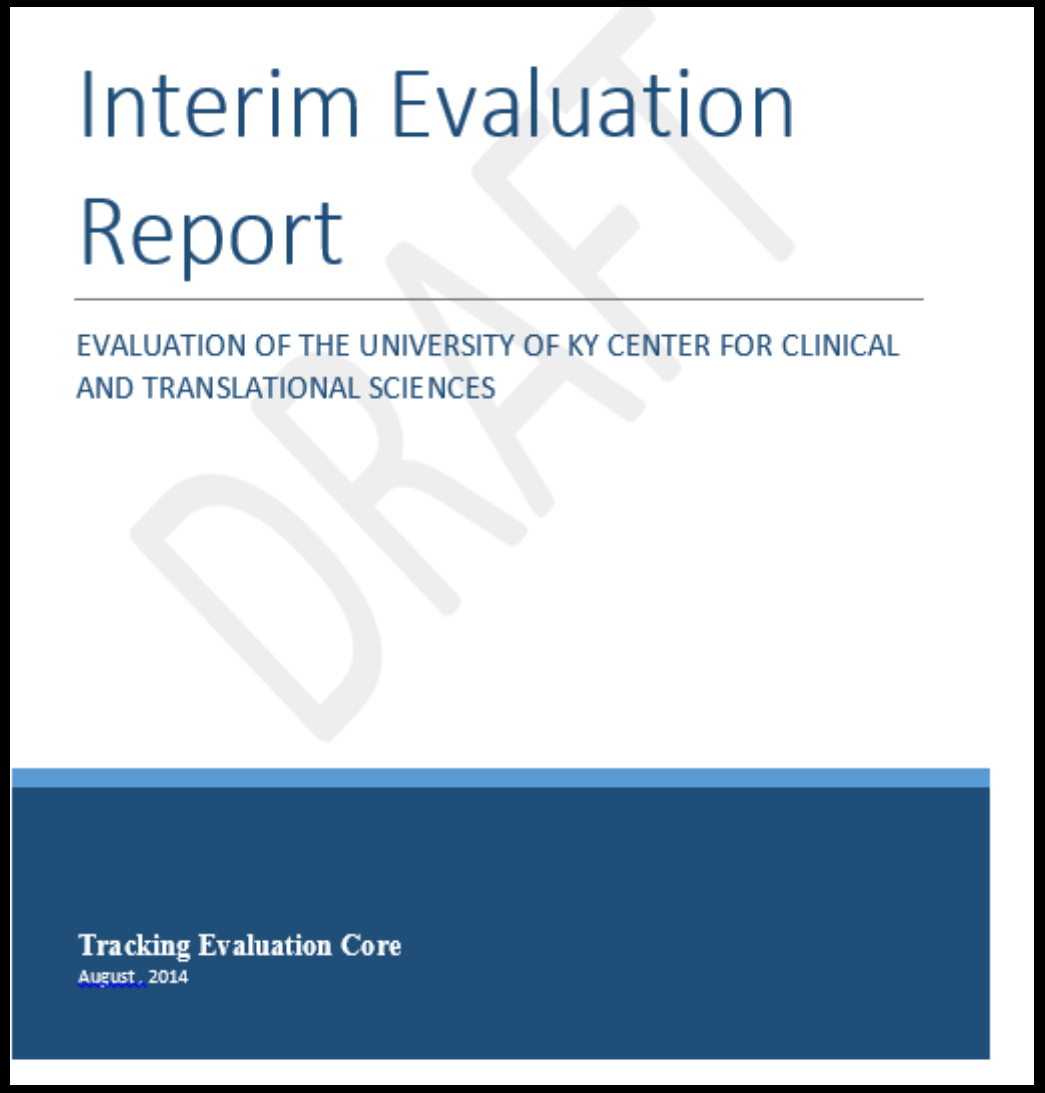
experiences


UNDERSTAND
OBSERVE
DEFINE
IDEATE
PROTOTYPE
TEST

So how does design thinking fit in evaluation?

Start from the basics: What does evaluation offer?

Tangible



Intangible


Intangible
Tangible


Barista
Consumer

Not that simple, really!

Line of Interaction

There are many people behind the line who influence consumer experience

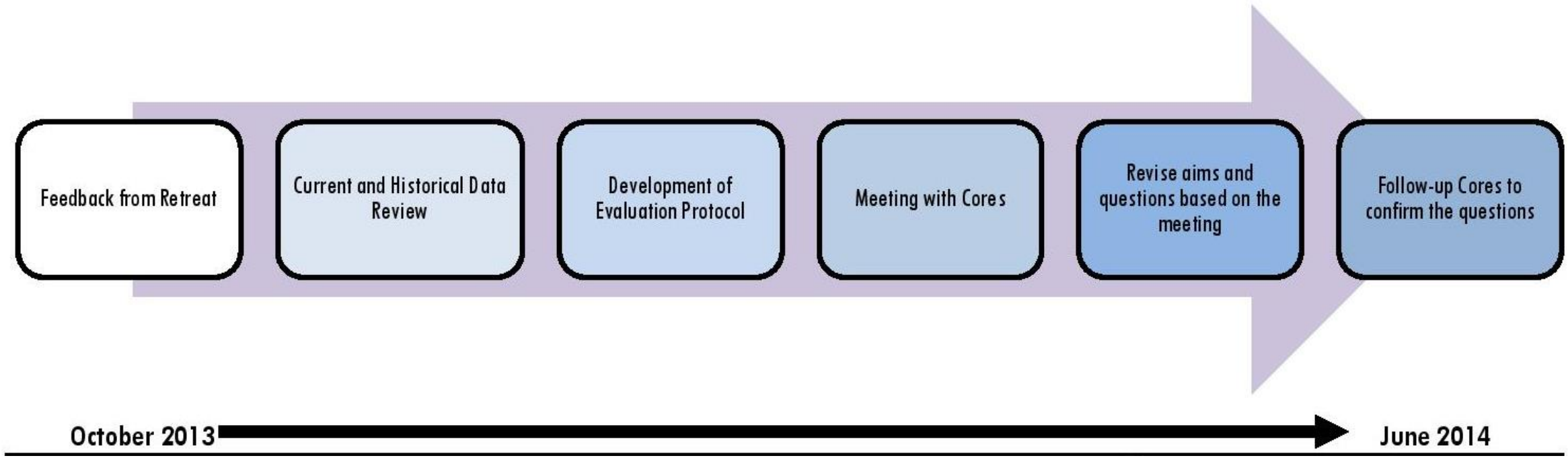
Barista

Consumer

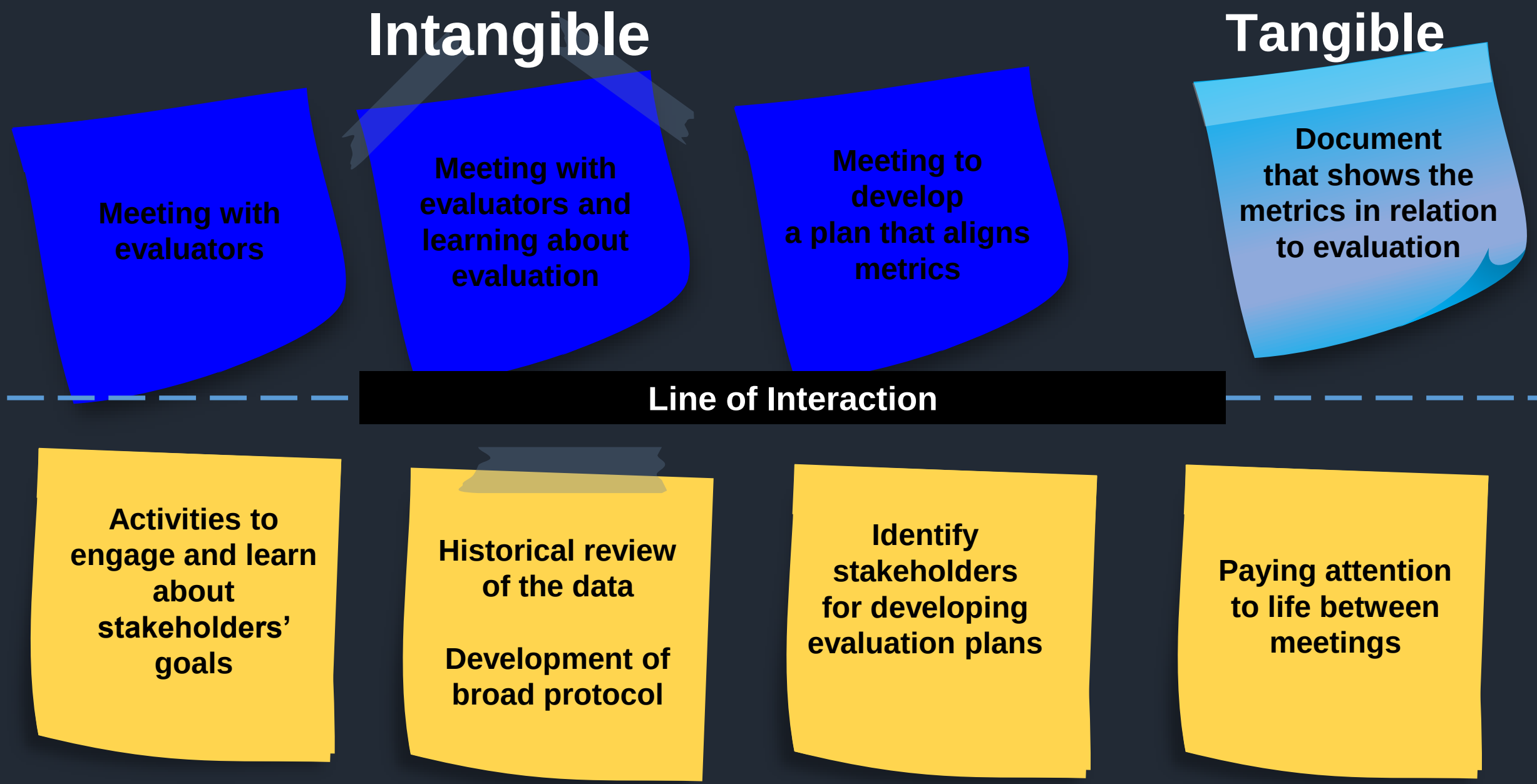
Designing an evaluation service

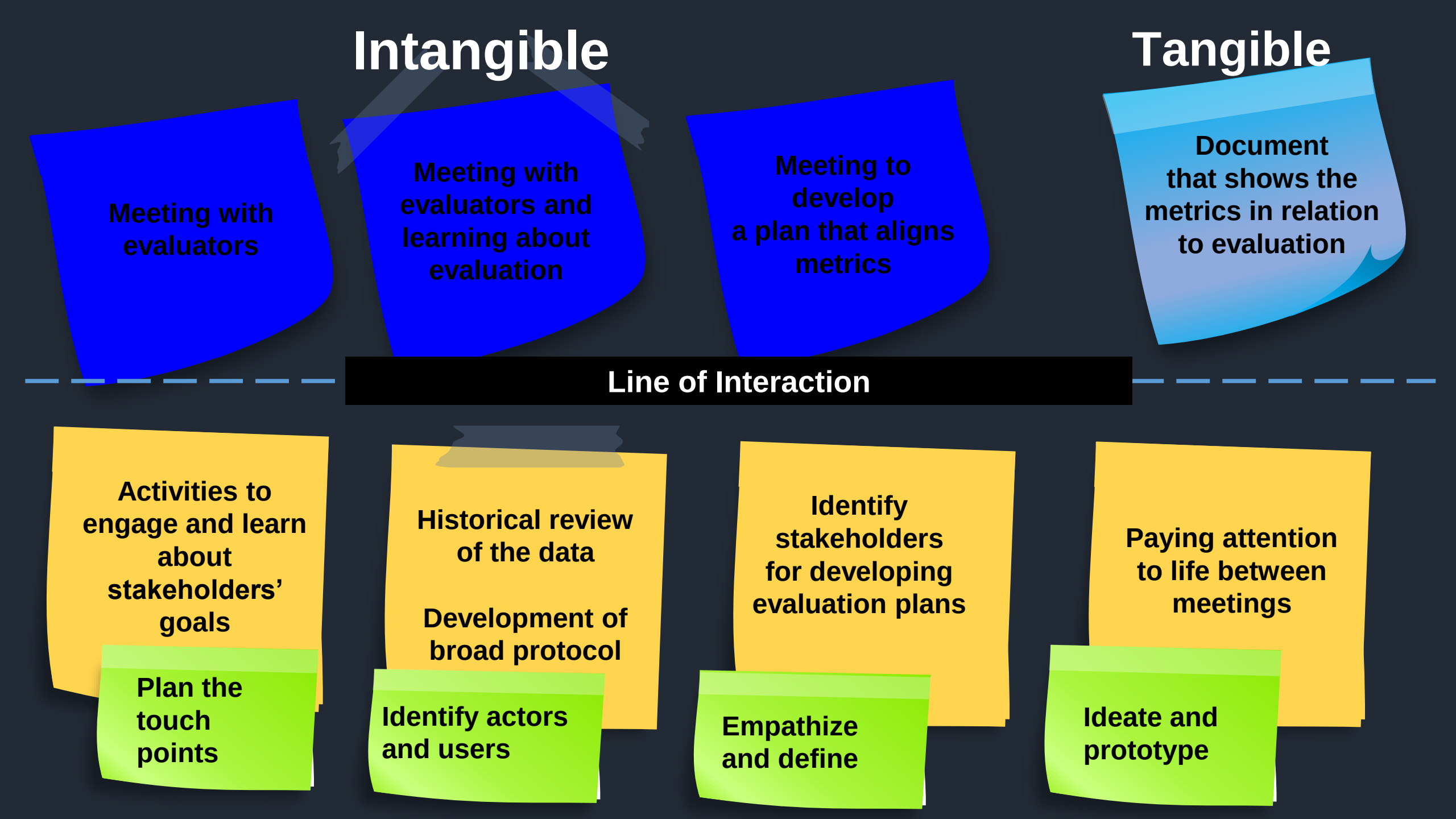
Service journey map: helps identify opportunities to enhance experience and visualize the kind of experience at each level of interaction

Phase I. Development and alignment of individual cores' evaluation and tracking plans with their aims and activities



Evaluation plans: Excitement and Interest!


Intangible
Tangible
Meeting with evaluators
Meeting with evaluators and learning about evaluation
Meeting to develop a plan that aligns metrics
Document that shows the metrics in relation to evaluation
Line of Interaction
Activities to engage and learn about stakeholders' goals
Historical review of the data
Development of broad protocol
Identify stakeholders for developing evaluation plans
Paying attention to life between meetings
Behind the scenes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Plan the touch points
Historical review of the data
Development of broad protocol
Identify actors and users
Identify stakeholders for developing evaluation plans
Empathize and define
Paying attention to life between meetings
Ideate and prototype

Actor

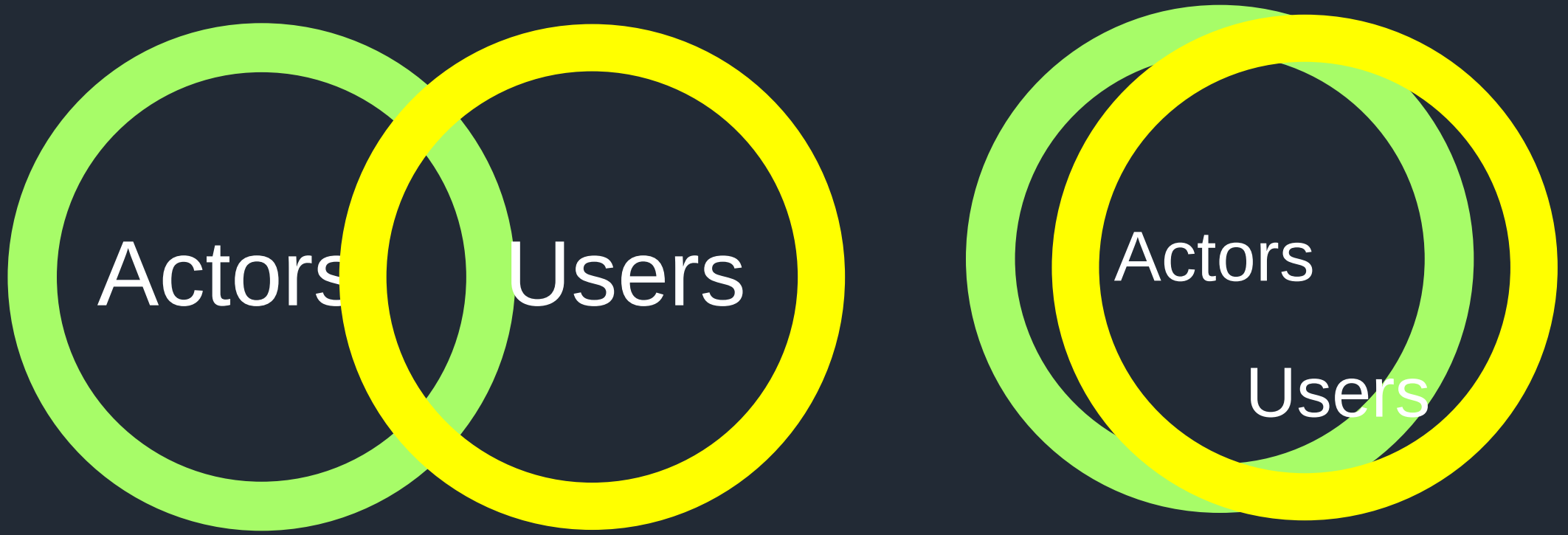
Actors are program staff who help in the evaluation and therefore influence the evaluation experience

User

Users are program staff who will use evaluation for program improvement

It is a fine line!

It is a fine line!



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Activities to engage and learn about stakeholders' goals

Plan the touch points

Historical review of the data

Development of broad protocol

Identify actors and users

Identify stakeholders for developing evaluation plans

Empathize and define

Paying attention to life between meetings

Ideate and prototype

Need finding and not need assessment!

Discover

Immerse

Connect

Detach

--Kouprie and Visser (2009)

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Identify stakeholders for developing evaluation plans

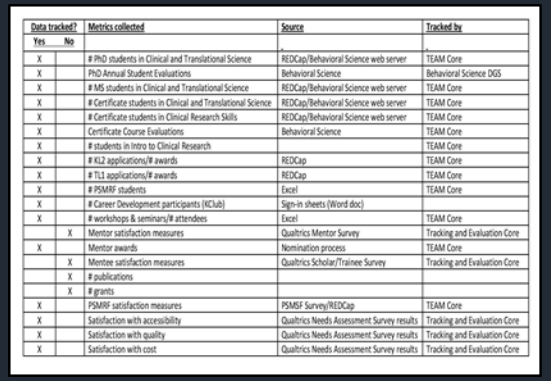
Empathize and define

Paying attention to life between meetings

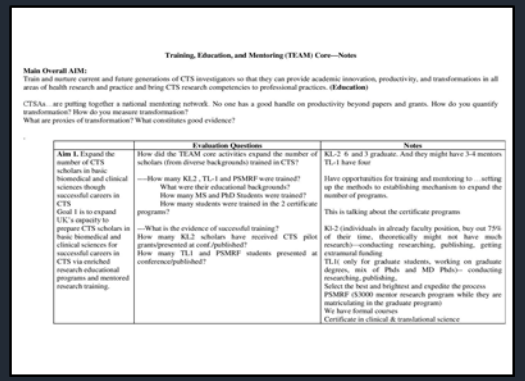
Ideate and prototype

Ideating & Prototyping: testing and learning from failures

Be selective! Stakeholders are investing time and effort



Data tracked?		Metrics collected	Source	Tracked by
Yes	No			
X		# PhD students in Clinical and Translational Science	REDCap/Behavioral Science web server	TEAM Core
X		PhD Annual Student Evaluations	Behavioral Science	Behavioral Science DGS
X		# MS students in Clinical and Translational Science	REDCap/Behavioral Science web server	TEAM Core
X		# Certificate students in Clinical and Translational Science	REDCap/Behavioral Science web server	TEAM Core
X		# Certificate students in Clinical Research Skills	REDCap/Behavioral Science web server	TEAM Core
X		Certificate Course Evaluations	Behavioral Science	TEAM Core
X		# students in Intro to Clinical Research		TEAM Core
X		# KL2 applications/# awards	REDCap	TEAM Core
X		# TL1 applications/# awards	REDCap	TEAM Core
X		# PSMRF students	Excel	TEAM Core
X		# Career Development participants (KClub)	Sign-in sheets (Word doc)	
X		# workshops & seminars/# attendees	Excel	TEAM Core
	X	Mentor satisfaction measures	Qualtrics Mentor Survey	Tracking and Evaluation Core
X		Mentor awards	Nomination process	TEAM Core
	X	Mentee satisfaction measures	Qualtrics Scholar/Trainee Survey	Tracking and Evaluation Core
	X	# publications		
	X	# grants		
X		PSMRF satisfaction measures	PSMSF Survey/REDCap	TEAM Core
X		Satisfaction with accessibility	Qualtrics Needs Assessment Survey results	Tracking and Evaluation Core
X		Satisfaction with quality	Qualtrics Needs Assessment Survey results	Tracking and Evaluation Core
X		Satisfaction with cost	Qualtrics Needs Assessment Survey results	Tracking and Evaluation Core

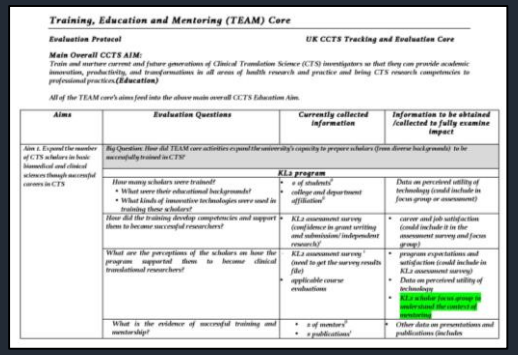


Training, Education, and Mentoring (TEAM) Core—Notes

Main Overall AIM:
Train and nurture current and future generations of CTS investigators so that they can provide academic innovation, productivity, and transformations in all areas of health research and practice and bring CTS research competencies to professional practices. **(Education)**

CTSAs…are putting together a national mentoring network. No one has a good handle on productivity beyond papers and grants. How do you quantify transformation? How do you measure transformation?
What are proxies of transformation? What constitutes good evidence?

	Evaluation Questions	Notes
Aim 1. Expand the number of CTS scholars in basic biomedical and clinical sciences though successful careers in CTS Goal 1 is to expand UK's capacity to prepare CTS scholars in basic biomedical and clinical sciences for successful careers in CTS via enriched research educational programs and mentored research training.	How did the TEAM core activities expand the number of scholars (from diverse backgrounds) trained in CTS? —How many KL2, TL-1 and PSMRF were trained? What were their educational backgrounds? How many MS and PhD Students were trained? How many students were trained in the 2 certificate programs? —What is the evidence of successful training? How many KL2 scholars have received CTS pilot grants/presented at conf./published? How many TL1 and PSMRF students presented at conference/published?	KL-2 6 and 3 graduate. And they might have 3-4 mentors TL-1 have four Have opportunities for training and mentoring to …setting up the methods to establishing mechanism to expand the number of programs. This is talking about the certificate programs KL-2 (individuals in already faculty position, buy out 75% of their time, theoretically might not have much research)—conducting researching, publishing, getting extramural funding TL1c only for graduate students, working on graduate degrees, mix of Phds and MD Phds)— conducting researching, publishing. Select the best and brightest and expedite the process PSMRF ($3000 mentor research program while they are matriculating in the graduate program) We have formal courses Certificate in clinical & translational science



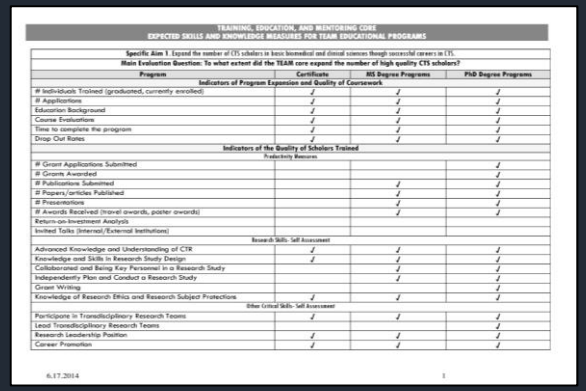
Training, Education and Mentoring (TEAM) Core

Evaluation Protocol ***UK CCTS Tracking and Evaluation Core***

Main Overall CCTS AIM:
*Train and nurture current and future generations of Clinical Translation Science (CTS) investigators so that they can provide academic innovation, productivity, and transformations in all areas of health research and practice and bring CTS research competencies to professional practices.**(Education)***

All of the TEAM core's aims feed into the above main overall CCTS Education Aim.

Aims	*Evaluation Questions*	*Currently collected information*	*Information to be obtained /collected to fully examine impact*
Aim 1. Expand the number of CTS scholars in basic biomedical and clinical sciences though successful careers in CTS	*Big Question: How did TEAM core activities expand the university's capacity to prepare scholars (from diverse backgrounds) to be successfully trained in CTS?*		
	KL2 program		
	How many scholars were trained? • *What were their educational backgrounds?* • *What kinds of innovative technologies were used in training these scholars?*	• *n of students*[1] • *college and department affiliation*[1]	*Data on perceived utility of technology (could include in focus group or assessment)*
	How did the training develop competencies and support them to become successful researchers?	• *KL2 assessment survey (confidence in grant writing and submission/independent research)*[1]	• *career and job satisfaction (could include it in the assessment survey and focus group)*
	What are the perceptions of the scholars on how the program supported them to become clinical translational researchers?	• *KL2 assessment survey*[1] *(need to get the survey results file)* • *applicable course evaluations*	• *program expectations and satisfaction (could include in KL2 assessment survey)* • *Data on perceived utility of technology* • *KL2 scholar focus group to understand the context of mentoring*
	What is the evidence of successful training and mentorship!	• *n of mentors*[1] • *n publications*[1]	• *Other data on presentations and publications (includes*



TRAINING, EDUCATION, AND MENTORING CORE
EXPECTED SKILLS AND KNOWLEDGE MEASURES FOR TEAM EDUCATIONAL PROGRAMS

Specific Aim 1. Expand the number of CTS scholars in basic biomedical and clinical sciences though successful careers in CTS.
Main Evaluation Question: To what extent did the TEAM core expand the number of high quality CTS scholars?

Program	Certificate	MS Degree Programs	PhD Degree Programs
Indicators of Program Expansion and Quality of Coursework			
# Individuals Trained (graduated, currently enrolled)	✓	✓	✓
# Applications	✓	✓	✓
Education Background	✓	✓	✓
Course Evaluations	✓	✓	✓
Time to complete the program	✓	✓	✓
Drop Out Rates	✓	✓	✓
Indicators of the Quality of Scholars Trained			
Productivity Measures			
# Grant Applications Submitted			✓
# Grants Awarded			✓
# Publications Submitted		✓	✓
# Papers/articles Published		✓	✓
# Presentations		✓	✓
# Awards Received (travel awards, poster awards)		✓	✓
Return-on-Investment Analysis			
Invited Talks (Internal/External Institutions)			
Research Skills- Self Assessment			
Advanced Knowledge and Understanding of CTR	✓	✓	✓
Knowledge and Skills in Research Study Design	✓	✓	✓
Collaborated and Being Key Personnel in a Research Study		✓	✓
Independently Plan and Conduct a Research Study		✓	✓
Grant Writing			✓
Knowledge of Research Ethics and Research Subject Protections	✓	✓	✓
Other Critical Skills- Self Assessment			
Participate in Transdisciplinary Research Teams	✓	✓	✓
Lead Transdisciplinary Research Teams			✓
Research Leadership Position	✓	✓	✓
Career Promotion	✓	✓	✓

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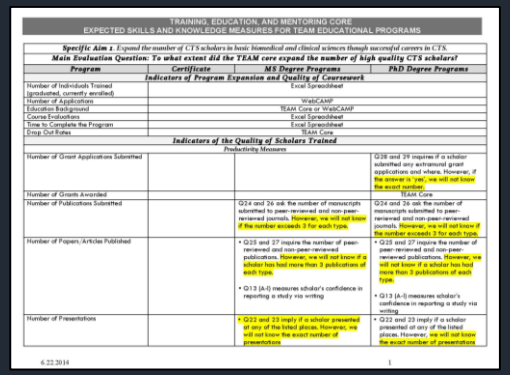

TRAINING, EDUCATION, AND MENTORING CORE
EXPECTED SKILLS AND KNOWLEDGE MEASURES FOR TEAM EDUCATIONAL PROGRAMS

Specific Aim 1*: Expand the number of CTS scholars in basic biomedical and clinical sciences though successful careers in CTS.*
Main Evaluation Question: To what extent did the TEAM core expand the number of high quality CTS scholars?

Program	*Certificate*	*MS Degree Programs*	*PhD Degree Programs*
Indicators of Program Expansion and Quality of Coursework			
Number of Individuals Trained (graduated, currently enrolled)	Excel Spreadsheet		
Number of Applications	WebCAMP		
Education Background	TEAM Core or WebCAMP		
Course Evaluations	Excel Spreadsheet		
Time to Complete the Program	Excel Spreadsheet		
Drop Out Rates	TEAM Core		
Indicators of the Quality of Scholars Trained			
Productivity Measures			
Number of Grant Applications Submitted			Q28 and 29 inquire if a scholar submitted any extramural grant applications and where. However, if the answer is 'yes', we will not know the exact number.
Number of Grants Awarded			TEAM Core
Number of Publications Submitted	Q24 and 26 ask the number of manuscripts submitted to peer-reviewed and non-peer-reviewed journals. However, we will not know if the number exceeds 3 for each type.		Q24 and 26 ask the number of manuscripts submitted to peer-reviewed and non-peer-reviewed journals. However, we will not know if the number exceeds 3 for each type.
Number of Papers/Articles Published	• Q25 and 27 inquire the number of peer-reviewed and non-peer-reviewed publications. However, we will not know if a scholar has had more than 3 publications of each type. • Q13 (A-I) measures scholar's confidence in reporting a study via writing		• Q25 and 27 inquire the number of peer-reviewed and non-peer-reviewed publications. However, we will not know if a scholar has had more than 3 publications of each type. • Q13 (A-I) measures scholar's confidence in reporting a study via writing
Number of Presentations	• Q22 and 23 imply if a scholar presented at any of the listed places. However, we will not know the exact number of presentations		• Q22 and 23 imply if a scholar presented at any of the listed places. However, we will not know the exact number of presentations

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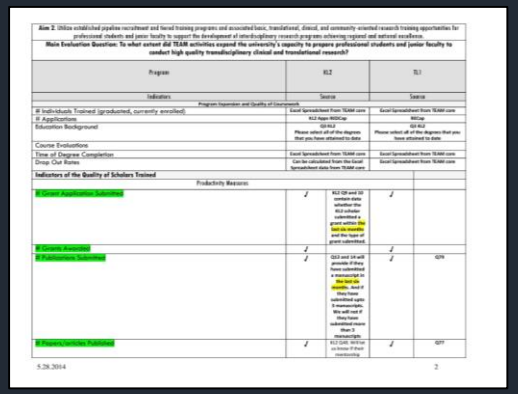


Aim 2: Utilize established pipeline recruitment and liaison programs and associated basic, translational, clinical, and community-oriented research training opportunities for professional students and junior faculty to support the development of interdisciplinary research programs achieving regional and national excellence.

Main Evaluation Question: To what extent did TEAM activities expand the university's capacity to prepare professional students and junior faculty to conduct high quality transdisciplinary clinical and translational research?

Program	KL2	TL1
Indicators	Source	Source
Program Expansion and Quality of Coursework		
# Individuals Trained (graduated, currently enrolled)	Excel Spreadsheet from TEAM core	Excel Spreadsheet from TEAM core
# Applications	KL2 Apps/ REDCap	REDcap
Education Background	Q10 KL2 Please select all of the degrees that you have attained to date	Q10 KL2 Please select all of the degrees that you have attained to date
Course Evaluations		
Time of Degree Completion	Excel Spreadsheet from TEAM core	Excel Spreadsheet from TEAM core
Drop Out Rates	Can be calculated from the Excel Spreadsheet data from TEAM core	Excel Spreadsheet from TEAM core
Indicators of the Quality of Scholars Trained		
Productivity Measures		
# Grant Applications Submitted	✓ KL2 Q9 and 10 ask whether any KL2 scholar submitted a grant within the last six months and the type of grant submitted.	✓
# Grants Awarded	✓	✓
# Publications Submitted	✓ Q23 and 24 will provide if they have submitted a manuscript in the last 6 months. And if they have submitted upto 3 manuscripts. We will not if they have submitted more than 3 manuscripts.	✓ Q29
# Papers/articles Published	✓ KL2 Q25, 26/27 do not let us know if their manuscript	✓ Q27

5.28.2014 2

University of Kentucky CCTS 1

SKELETON EVALUATION PLAN

TRAINING, EDUCATION & MENTORSHIP

AIM 1

The first aim of this core is to **expand the number of CTS scholars in basic biomedical and clinical sciences though successful careers in CTS.** (UK CCTS AIM: Education)

AIM 1 ACTIVITIES

To achieve this aim, TEAM team members:

- ACTIVITY 1: Provide indicators of program expansion and quality of coursework for the certificates, masters and PhD programs
- ACTIVITY 2: Provide indicators of the quality of scholars trained for the certificates, masters and PhD programs

THE QUESTION

Therefore, TEAM asks of itself, **to what extent did the TEAM core expand the number of high quality CTS scholars?**

THE PATH TO THE ANSWER

To answer this question, TEAM team members do the following:

ACTIVITY 1: Provide indicators of program expansion and quality of coursework
(Instrument or source, if applicable: Excel spreadsheet)

- Number of individuals trained (graduated, currently enrolled)
- Number of applications
- Educational background
- Course evaluations
- Time to program completion
- Drop-out rates

ACTIVITY 2: Provide indicators of the quality of scholars trained
(Instrument or source, if applicable: "Annual Self-Assessment Survey" results where applicable)
Productivity Measures

- Number of grant applications submitted
- Number of grants awarded
- Number of publications submitted
- Number of papers/articles published

Meeting with evaluators

Meeting with evaluators and learning about evaluation

Meeting to develop a plan that aligns metrics

Document that shows the metrics in relation to evaluation

Activities to engage and learn about stakeholders' goals

Plan the touch points

Historical review of the data

Development of broad protocol

Identify actors and users

Identify stakeholders for developing evaluation plans

Empathize and define

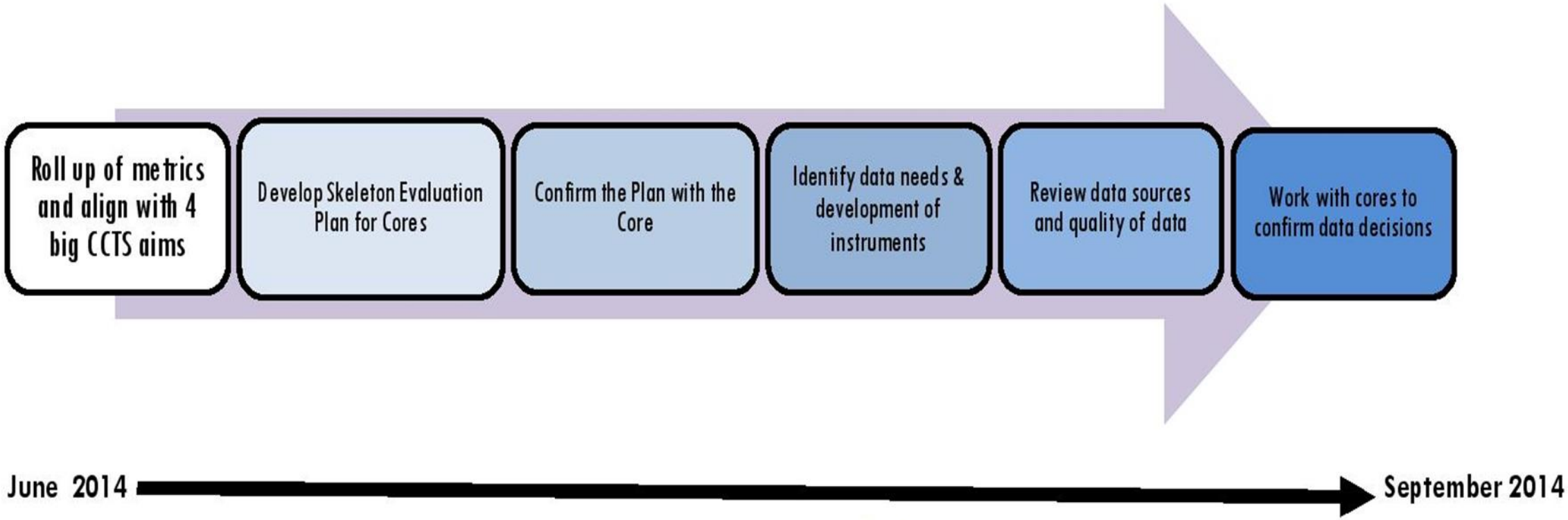
Paying attention to life between meetings

Ideate and prototype

YouTube


METRICS, PEOPLE & SOURCES
SKELETON EVALUATION PLAN
PILOT CORE
DR. CURRY
AIM 1
The first aim of this core is to fund new ideas to support high quality collaborative team science and new methodologies, across the spectrum of new and established investigators, to address the health care needs in Appalachia.
AIM 1 ACTIVITIES
To achieve this aim, Pilot team members
• ACTIVITY 1: Administer pilot awards and CCTS small grants

Phase II. Examination of how individual core's metrics and measures inform the CCTS impacts on clinical and translational science



Instrument Development: Exploration and curiosity

Lesson Learned: Different early adopters


Stick to the process!