Element B. Continuous Quality Improvement & Evaluation

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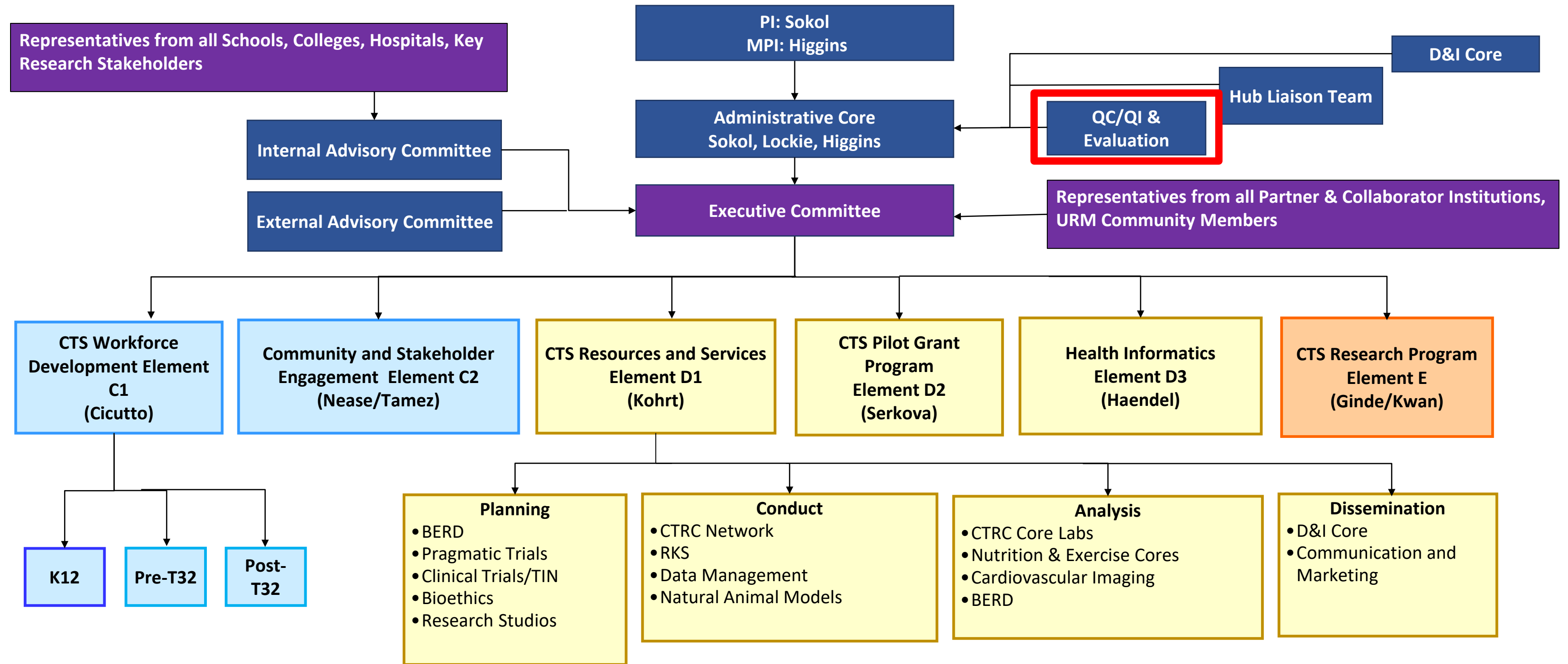**Office of the Vice Chancellor for Research**

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Integration Across CCTSI

Leadership Team & Diversity

Evaluation Core Personnel:

- CU-Denver

Goldie Komaie, PhD
Evaluation Lead

Elizabeth Sweitzer
Community Engagement

Grace Gonzalez
CTS-Pilots

Ryan Welle
Workforce Development

Continuous Quality Improvement
:

- CU-Anschutz Medical Campus

Leah Emerick
CQI Lead, Office of the Vice Chancellor for Research

Strategic Goals

1. **Goal**: Establish specific metrics to demonstrate local CTSA impact through rigorous program evaluation.

2. **Goal**: Disseminate research results and best practices broadly.

3. **Goal**: Integrate Quality and Process Improvement Program (QPIP) activities to continuously improve programs and CCTSI's impact.

4. **Goal**: Participate in national-level efforts to develop and implement metrics to measure the impact of the CTSA program.

Year 1 Plans for Evaluating CCTSI Programs: Workforce Development

Program	Metrics	Data Collection Methods	Timeline
T32 Pre & Post Doctoral Programs	• Retention in CTR academic pipeline (by gender, race, ethnicity, discipline) • Demographics, diversity • Research productivity (grants, publications, and bibliometrics) • Career advancement	• Annual follow-up survey • Application data • Web of Science • NIH Reporter • CVs and departmental webpages	Annually
K12 Mentored Career Development Awards	• Return on Investment • % with independent funding (own K or R level award) • Publications • Career advancement, new leadership positions • Retention/persistence in CTR	• NIH Reporter • Web of Science • NIH Reporter • CVs and departmental webpages	Annually

Year 1 Plans for Evaluating CCTSI Programs: Workforce Development

Program	Metrics	Data Collection Methods	Timeline
Grant Review & Mock Study Sections (Pre-F, Pre-K, Pre-R)	• # of grant applications reviewed, awarded, resubmitted, grant amount • Grants tracked by NIH grant mechanism (NIH reporter), Foundation, non-NIH government via longitudinal tracking • NIH success rates compared to national and institutional benchmarks	• Post-participation surveys • NIH Reporter • Compared to NIH success rates by mechanism	• 3x per year • Annual program summaries

Year 1 Plans for Evaluating CCTSI Programs: Workforce Development

Program	Metrics	Data Collection Methods	Timeline
Communicating Your Science to the Public	• 20 items measuring effectiveness in communicating scientific messages to the public	• Post-workshop series survey	• 3x per year • Annual aggregate program evaluation summary
Teaming & Leading for CTR	• Team Planning • Managing a Team • Interpersonal Relations • Collaboration	• Pre/post-evaluation survey	• Semi-annually
Mentoring (new)	• CIMER measures for both mentors & mentees	• Pre-workshop series survey • Workshop evaluation surveys • Post-workshop series survey	• Annually

Year 1 Plans for Evaluating CCTSI Programs: Resources & Services

Program	Metrics	Data Collection Methods	Timeline
CTS-Pilots	• Follow-on funding, Return on investment • Publications and patents • TSBM metrics	• Follow up survey with past grantees (for 5 years) • Search of secondary databases (e.g. NIH Reporter/granttome.com) • Development of TSBM Impact Profiles	Annually
CTRC User Satisfaction Survey	• Satisfaction with CTRC sites, resources, and staffing • Utilization of CTRCs and Core services • Collected feedback on billing, implementation of new protocols, and communication with CTRC staff	• User Satisfaction Survey	Annually

Year 2 Continuous Quality Improvement Plans

Quality & Process Improvement Program (QPIP)

Establish a QPIP Steering Committee | Governance Group to review and prioritize high-level improvement opportunities

- Determine committee representation

- Develop transparent criteria for reviewing and prioritizing improvement projects

- 1-2 high impact projects will be prioritized

- CQI Lead, Leah Emerick, will facilitate and support high impact projects

- Each improvement project will be evaluated based on distinct metrics as determined by project focus and scope

Year 2 Continuous Quality Improvement Plans

Quality & Process Improvement Program (QPIP)

Deployment of Front-line Gemba Walks across CCTSI Cores

- Originating from the Japanese term "gemba" meaning "the real place", a **gemba walk** is a leadership practice of observing and collaborating with staff at the place where work is being done.

- Front-line gemba walks have been scheduled in all CCTSI cores in 2024.

Expected Benefits:

- Empower employees by demonstrating that leadership values their input and is committed to understanding their work environment

- Encourage a culture of continuous learning and improvement at all levels of the organization. Through regular engagement with frontline operations, leaders gain new insights and perspectives, fostering a mindset of adaptability and innovation.

- Help ensure alignment between organizational goals and day-to-day actions. Leaders can assess whether frontline activities are in line with strategic objectives, identify areas for improvement, and provide guidance to ensure that efforts are directed towards achieving desired outcomes.

Year 2 Evaluation Plans

- **Community Engagement & Health Equity**
  - \# investigators and professional research staff trained in DEIA and community engagement
  - \# Community Based Organizations' (CBOs) trained and readiness to engage in research
  - Increased network of CBOs willing to partner on research, successful academic and CBO partnerships

- **Health Informatics**
  - REDCap users and projects; Utilization of REDCap training materials
  - Publications and grants submitted/awarded as well as projects using new data types
  - \# of students participating in informatics training and certificate programs

Beyond Year 2 Evaluation Plans

- **PEET Program (Element E)**

  - # of demonstration projects proposed, reviewed, awarded

  - Awarded projects' publications, impact and follow-on funding

  - EHR implementation metrics (program specific, TBD)

  - TSBM Impact Profiles in collaboration with D&I Core

- **Institute-Wide Needs Assessment – Year 3-4**

  - Utilization of CCTSI resources/services

  - Satisfaction with resources

  - Anticipated programmatic needs

National Representation and D&I

- **CTSA Evaluators Group**

- **Evaluator, NIH-funded Multi-Institutional Research Consortium**

  - Center for Linkage and Acquisition of Data (CLAD), *All of Us* Research Program

  - Integration, Dissemination and Evaluation Center for the NIH Bridge to Artificial Intelligence (BRIDGE2AI), BRIDGE Center Teaming Core

Questions for EAC

- How do you see other institutes sharing their impact with different audiences (academic, community, hospitals, public health)?

- As we develop the criteria for reviewing and prioritizing high-level improvement projects, from your perspective, are there certain criteria you think will be important for us to include?

- Implementing a survey tool (something like the NACCHO QI Self Assessment Tool) to evaluate QI Culture over time is of some interest to us. Would this type of culture outcome be seen as beneficial?