

# Reinforcing meritorious, efficient research using a system-wide study authorization process

SRAI Midwest/Northeast Section Meeting

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We are **AdvocateAuroraHealth**

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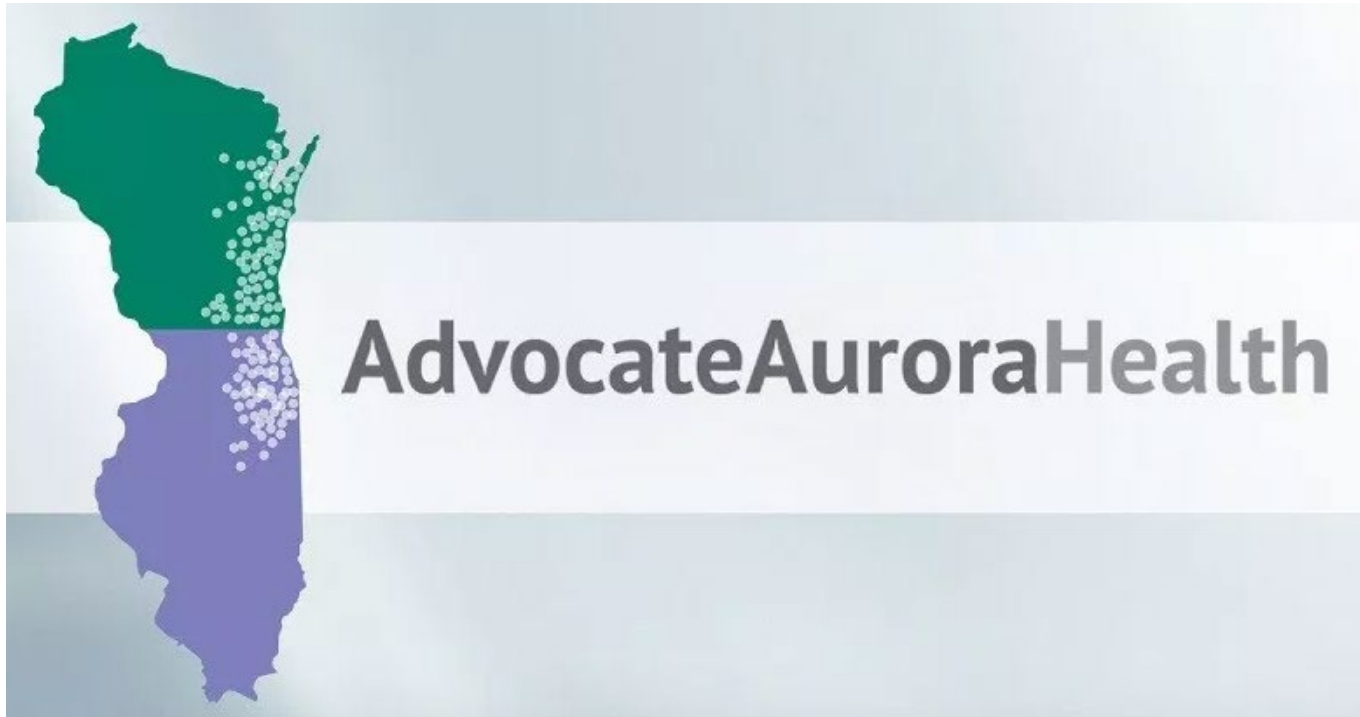
***No conflicts of interest***



# Objectives

- Discuss the need for research administrative preauthorization (RAP) process.
- Illustrate RAP process steps.
- Share preauthorization tools.
- Discuss basic requirements and issues.
- Translate generalizability of RAP.

# Advocate Aurora Merger



# Aurora Health Care

- Serves 60% of WI population.
- 30,000+ employees.
- 3,600+ physicians.
- \$25M+ in research expenditures.



# Aurora Research Institute

Purpose: Help people live well *through innovative research*.

- Performs research (12 PhD researchers).
  - Supports system-wide research.
- 
- 180 employees
  - 300+ sponsored clinical trials
  - 250+ investigator-initiated research projects

# Aurora Research Institute

Main research areas:

- Neuroscience
- Cardiovascular
- Oncology
- GI
- Maternal/fetal health



# Research Resources

- Research scientists
- Research associates
- Data analytics
- Research contracting
- Biorepository
- Research coordinators
- Regulatory specialists
- Sponsored Programs Office
- Publishing office
- Internal funding
- 5,000 sq. ft. wet laboratory



# Before RAP

Originally: ***Wild wild West.***

IRB oversight only.

Research team connected  
directly with resources teams.



# Before RAP

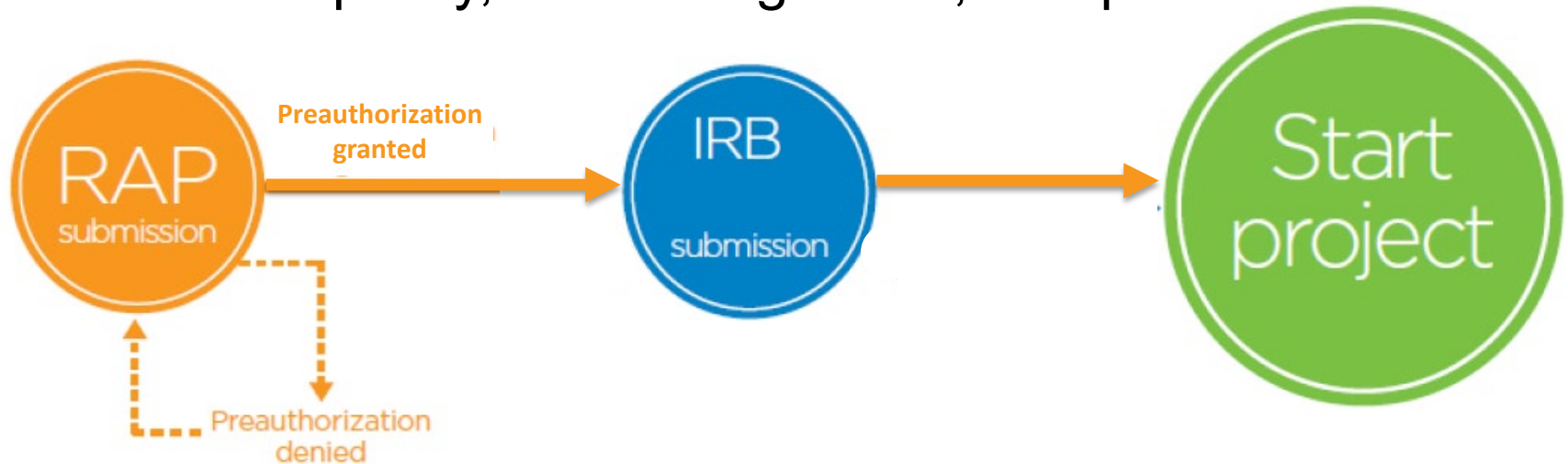
- Resource teams overwhelmed; difficult to sync around projects.
- Research teams upset at speed of resource teams.
- Inequality for research support.
- Lack of awareness of projects, so struggle to manage:
  - Quality
  - Ethics
  - Compliance
  - Resource efficiency
- Need to centralize the research administration and resources.

# RAP v1.0 (2014)

0.1 FTE

## RAP launched in 2014

**Purpose:** To provide pre-review early in research process to maximize quality, ethical alignment, and priorities.



# RAP v2.0 (2017)

0.6 FTE

**+ Delegates + research expert + all research**



# RAP v2.0 (2017)

## **Pros:**

- Faster decisions.
- Delegates understand area's priorities and teams.
- Delegates acquire better understanding of all research in their area.
- Feedback to investigator, not just judgement.
- Better understanding of all research.

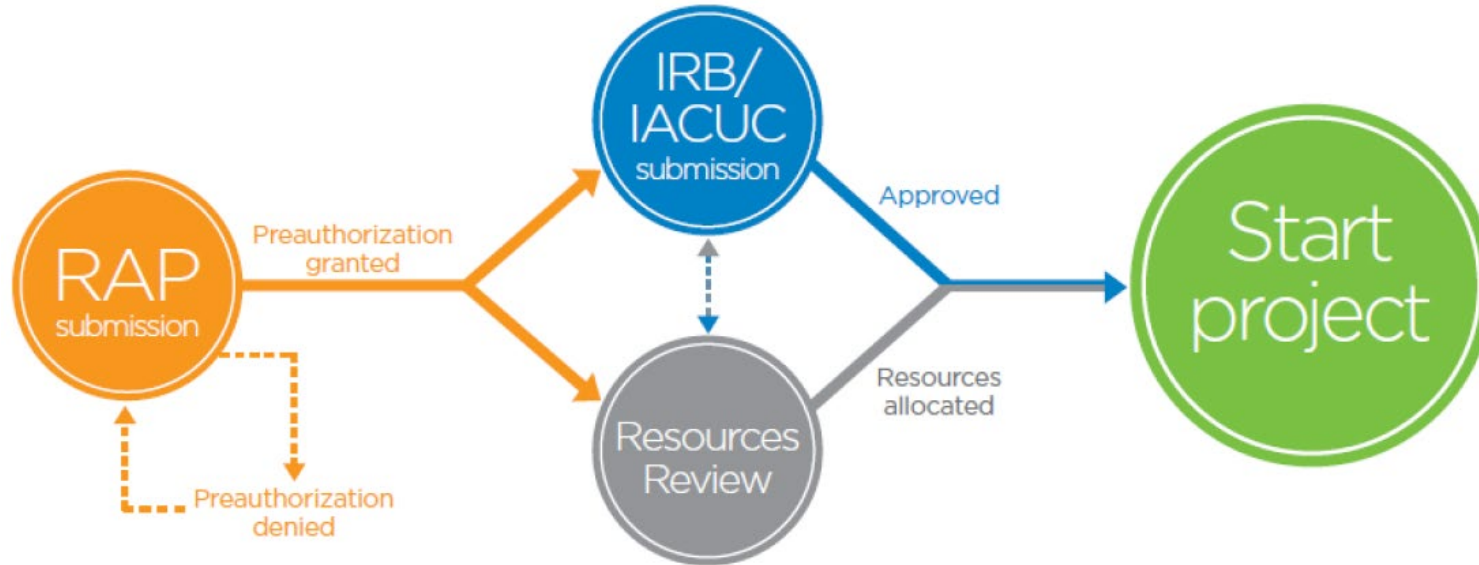
## **Cons:**

- Resources teams still overwhelmed.
- Still no coordination by resources teams.

# RAP v3.0 (2017)

1.1 FTE

**+ Delegates + research expert + all research + resources review + admin**



# RAP v3.0 (2017)

## Pros:

- Quantifies the resources needed.
- Proposals only reviewed by resources committee if preauthorized.

## Cons:

- Resources quantified after the decision was made.
- Allows some feedback by scientific reviewer, but not really feedback from resources teams.

# RAP v3.0 (2017)



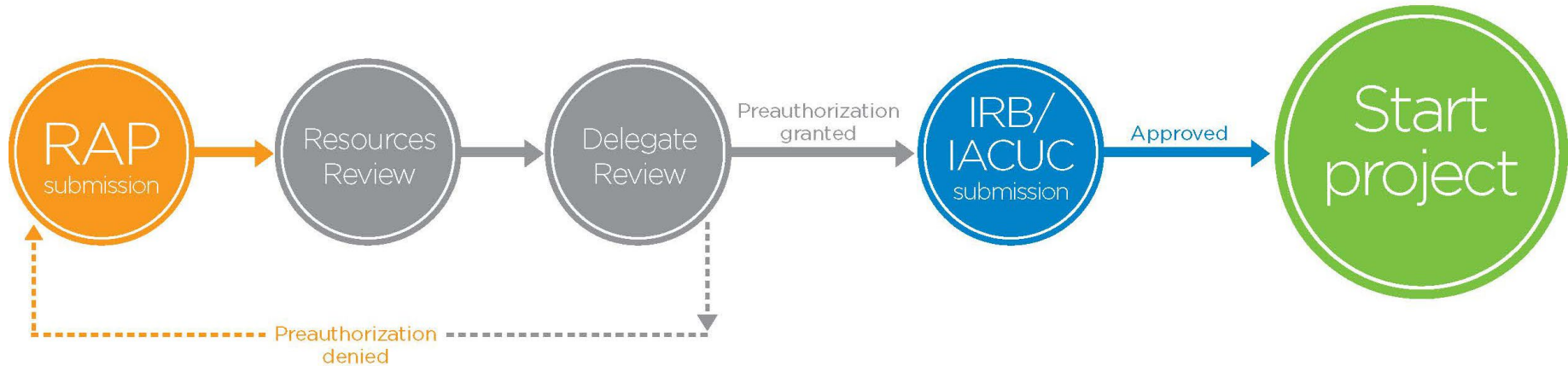
- RAP Manager
- RAP Scientist
- Data Analytics
- Contracting
- Biorepository
- Regulatory
- Coordinators
- Biostatistics



# RAP v4.0 (2018)

1.1 FTE

**+ Delegates + research expert + all research  
+ resources review + admin + policy**



# All research requires RAP

- **Sponsored studies (e.g., clinical trials, grants):** Review process and authorization by protocol selection committee, manager, or President.
- **All other studies (investigator-initiated):**
  - RAP form.
  - Resource & scientific scoring committee.
  - Delegate review and authorization.

# Tracking of projects

- Confirmation of preauthorization email.
- RAP administrator maintains project list:
  - Clinical trials
  - All other studies



# RAP Form

- PI/team
- Rationale
- Objective/Hypothesis
- Endpoints
- Design
- References
- Resources

## Aurora Principal Investigator

Name and degree(s)	
Email	
Phone	

Preferred study contact ☐ Check here if same as above

Name and degree(s)	
Email	
Phone	
Role in the project	

Study / project title:

Initial submission ☐ Resubmission ☐

### Area of research (Check all that that apply)

☐ Cardiology ☐ Oncology ☐ Neurology ☐ Gastroenterology ☐ Women's health ☐ Nursing  
☐ AUWMG ☐ CUPH ☐ Rare disease ☐ Other (describe):

### Category of research study (Check all that apply)

☐ Human subject research (☐ Medical record review ☐ Interventional ☐ Observational ☐ Nonclinical)  
☐ Animal research (☐ Drug discovery ☐ Basic science ☐ Translational science)  
☐ Educational (☐ Case report/series ☐ Method)  
☐ Quality assurance/improvement  
☐ Other (describe):

### Which of these products will be included in the study? (Check all that apply; this includes medical record review)

☐ Drug ☐ Device ☐ Biologic ☐ Digital Health ☐ Other (describe):   
☐ None

Are there fixed timelines for this project? Yes ☐ No ☐ If yes, please provide projected start/end dates:

Is this project being conducted to fulfill the scholarly activity requirement of a residency or fellowship program? Yes ☐ No ☐ If yes, please resident/fellow name(s) and program:

Who generated the idea for this project?

# RAP Form

*How can we help support your study?*

## Biological samples / Biospecimens

*If none, check here:* ☐

- A. Will biological samples be collected from Aurora patients as part of the study? Yes ☐ No ☐
- B. Will biological samples be sent to / received from an external organization? Yes ☐ No ☐
- C. What types of biological samples are needed (e.g. fresh tissue, blood/plasma/serum, urine, slides, etc.)?
- D. Approximately, how many biological samples will be needed in total?
- E. Will biological samples be collected and stored for future unspecified research (banking or sub-study)?  
Yes ☐ No ☐

## Data

*If none, check here:* ☐

- A. Briefly describe data collection methods.
- B. Who will be collecting these data (e.g. your study team, Res
- C. Who will de-identify the data and how?
- D. Do you plan to use an Aurora Research Institute biostatistician?

## Regulatory and research coordinator support

*If none, check here:* ☐

- A. Who will be submitting the regulatory filings for the study?
- B. Will this study require a research coordinator? Yes ☐ No ☐

## Innovation

*If none, check here:* ☐

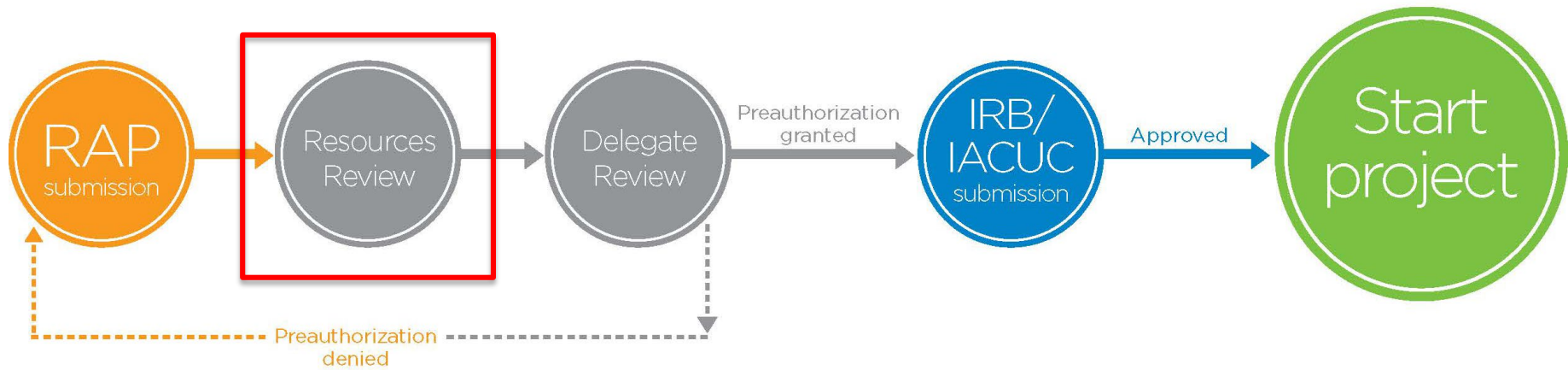
- A. Could the results of your study apply to, or study design include, therapies directed to rare disease, patients with inadequate therapeutic options, or patients without a FDA-approved therapeutic option? Yes ☐ No ☐
- B. Have you conducted a Medtrack review? Yes ☐ No ☐
- C. Is the approach, method or test article (drug, device, digital health, other) novel? Yes ☐ No ☐
- D. Has any aspect been publically disclosed? Yes ☐ No ☐

## Animal research

*If none, check here:* ☐

- A. What animal type is being used?
- B. Do you have an existing IACUC approval for this study? Yes ☐ No ☐

# RAP v4.0 (2018)



# Resources & Scientific Scoring

- Resource Needs
- Patient Impact
- Therapeutic Potential and Priority
- Institutional Priority
- Funding

Score Summary	
Resource (-)	100
Scientific (+)	295
Funding (+)	0
Total	195

Score	Weighted Score
Total Score	195

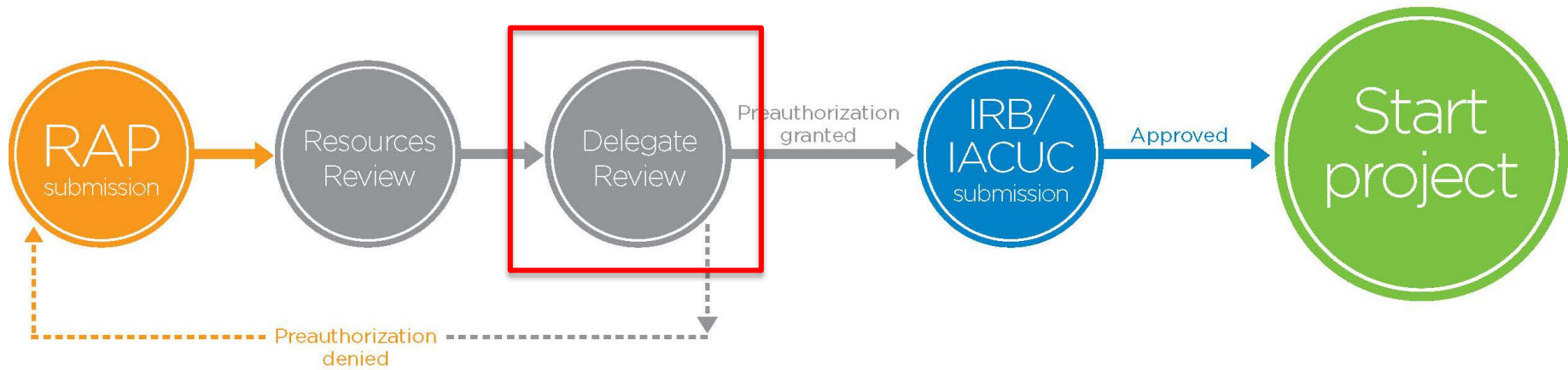
# Resources & Scientific Scoring

	Score	Weighted Score	
<b>Scored 0 (no resources) to 4 (heavy resource needs)</b>			
<b>Resource Needs</b>			
Biorepository and Specimen Resource Center (BSRC) (Consent, collecting, storage, distribution)	0	0	None
Research Analytics (Data collection, biostatistics)	3	75	Data collection, de-identify data and biostatistician. NDVI calculations. 40 hours data pull, but M components 150-200 hours. Biostatistician lightly engaged on this. Data Analytics would have to figure out how to do the NDVI and document the process for reproducibility.
Regulatory and Coordinator (IRB or FDA filing, consent patients)	1	25	Expedited review for retrospective chart review. Consent waiver. Gary already assigned to it for the application.
Research Business Services (RBS) (Medicare coverage analysis, budgets, agreements)	0	0	None
	<b>Resource Score</b>	<b>100</b>	

	Score	Weighted Score	
<b>Scored 0 (lowest) to 4 (highest)</b>			
<b>Patient Impact</b>			
Scope of problem (e.g., # of individuals affected, rare disease, patient cost, prevalence)	4	40	X is a sizeable patient population problem.
Degree of patient health impact (e.g., unmet medical need, severity, quality of life, communicability)	2	10	The association between x and Y has been already determined. Residing in urban regions with more x may lead to a reduced risk of y (Author1, 2012; Author2, 2017; Seo, 2019). Moreover, residential proximity to x is associated with higher survival rates after y (Author3, 2008). However, the authors will investigate other socioeconomic factors associated with the incidence of x using Tool Y.
Potential to impact related conditions	4	20	Yes, there is potential to identify an association between x and z and y.
Immediate impact to improve patient care/outcomes (within 3 years)	0	0	No immediate impact to improve patient care/outcomes.
Long-term potential to improve patient care/outcomes (within 10 years)	1	10	Uncertain potential to improve patient care long-term. The authors claim that data from this study may support a cost benefit analysis of x intervention on health care costs and health outcomes. However, there is no pathway to practice described in RAP form.
Study includes a credible plan to change patient care/outcomes (completion within timeline, likelihood of success, Pathway to Practice)	0	0	This is a retrospective matched case-control study and thus, there is a risk for selection and observation bias that will limit the findings. Pathway to practice was not described.



# RAP v4.0 (2018)



# Who provides authorization

## Protocol Selection Committee (Clinical Trials)

- Members include:
  - Research leader
  - Clinical service line leaders
  - PI (presents proposal)



# Who provides authorization

## Protocol Selection Committee (Clinical Trials)

- Review criteria include:
  - Financial feasibility
  - Patient availability
  - Sponsor history
  - PI history
  - Other



# Who provides authorization

## Non-clinical Trials: RAP delegate

- Research leader
- Aligned with clinical service line(s)
- Administrative responsibility for project
- May be involved in an appeal for a re-review



# Delegate review of proposal

- Conduct own review.
- Consider:
  - PI/study team research history (likelihood of success).
  - Strategic alignment with program goals.
  - Financial feasibility.
- Then, consider resource review committee score and recommendation.

# Decisions. Decisions.

Delegate communicates with other research leaders when:

- Project crosses clinical disciplines.
- Resources from multiple areas needed for project.
- Assistance is needed to make decision.
- Support is needed when decision is not favorable.



# Example: New investigator

New to research.

Has scientific question.

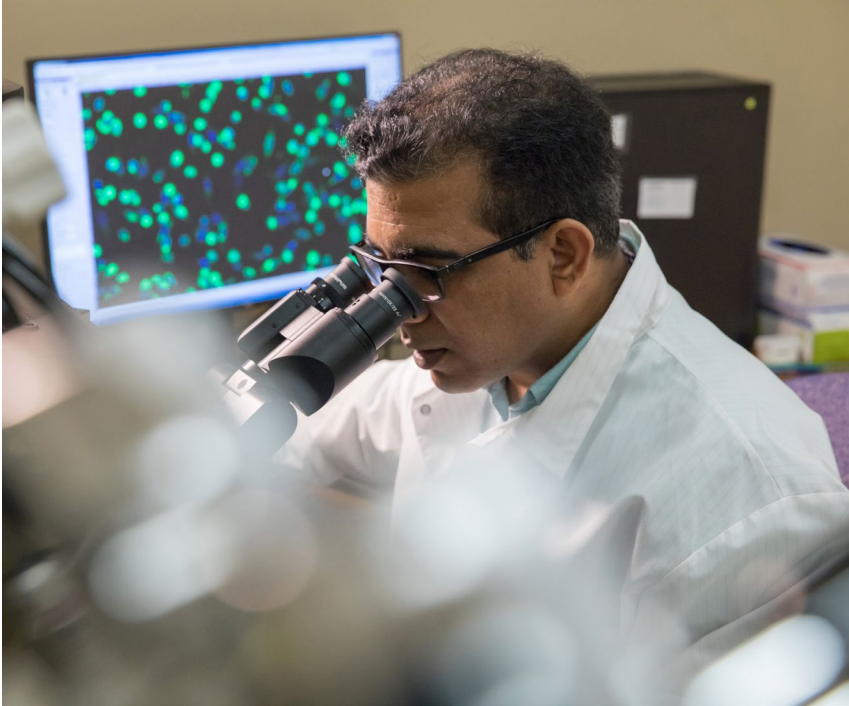
Needs resources.

No funding.

→ **Contact RAP!**



# Example: Seasoned investigator



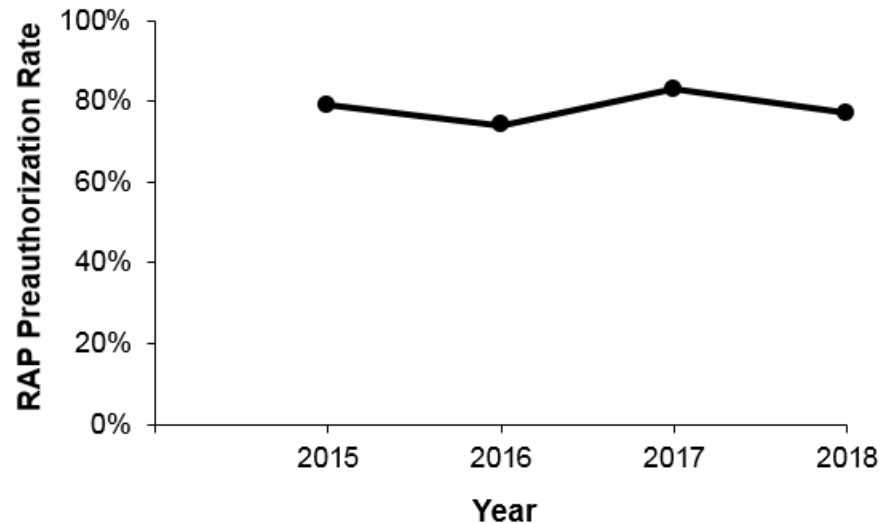
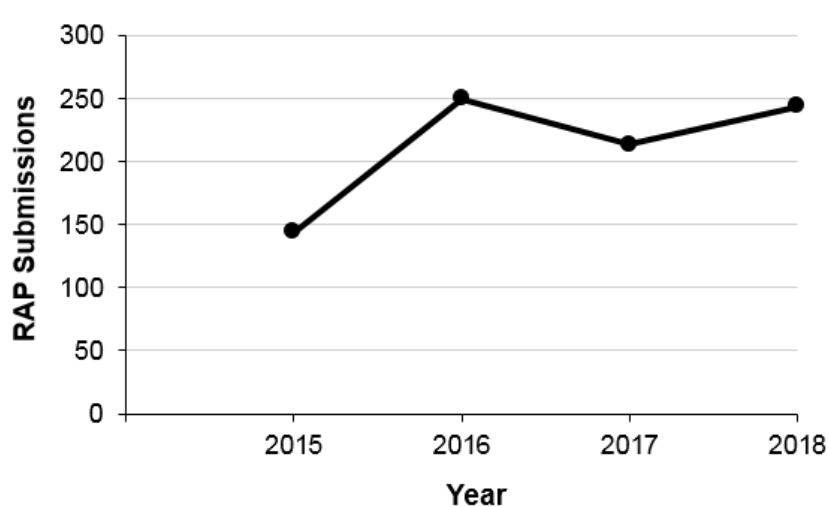
Submits RAP proposal

or

Authorized via grant



# RAP measurements



# Lessons learned

- No contingent approvals.
- Say “try again” instead of “no.”
- Reinforce projects with funding.
- Ensure consistent communication (one mailbox).
- Keep delegates anonymous.
- Keep it short and sweet.



# Ingredients

- ✓ System authorization for research oversight.
- ✓ Policy or SOP.
- ✓ A carrot (resources?).
- ✓ RAP form.
- ✓ Scientific and resource assessment.
- ✓ Engaged leader or delegates.
- ✓ Expedient, communicative process.



# Environment

- ✓ Health Care System.
- ✓ Centralized research support services and administration.
- ✓ Institutional funding for research support services.
- ✓ Clinical service lines are similar to departments in academic setting.
- ✓ Communication essential between service lines and research.



# To-do list for AAHRI

- Gauge total research resources and set system limits.
- Set a timeline for resource utilization by teams.
- Develop process for following up on project outcomes.
- Increase communication around delegate/resource team disagreements.
- People still upset when their proposals are declined – can we improve?



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