



SCHOOL OF MEDICINE
DEPARTMENT OF ANESTHESIOLOGY & CRITICAL CARE MEDICINE

Using Smartsheet® to track, support, and document resident QI activities

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Introduction

In early 2020, personnel involved with the Anesthesiology Department's quality assurance, residency, and research programs convened in an effort to address two pressing concerns.

One of these was that Quality Improvement (QI) activities by residents had a tendency to begin well, with real enthusiasm and smooth progress, but then **gradually lose priority** as the pressures and obligations of residency won out.

ACGME also announced expectations of **demonstrated QI competence** among residents, and included QI presentations among the categories that can meet program requirements for faculty.

Conveniently, UNM SOM now emphasizes QI as an element considered for **faculty promotion**.

The department needed a way to ensure both progress and documentation, and settled on a project-management software platform (Smartsheet®), with launch in May 2020.

We have multiple projects ongoing, but tracking has been an issue

- Smartsheet Tracker
- Routine reminders and updates
- **NOT** meant to be a policing activity
- **Purpose**

- **Organize department activities for reporting purposes**
- **Generate timely reminders for investigators**
- **Ensure resident participation in quality improvement activities**
- **Encourage participation of others in quality improvement activities through organized central repository of ongoing projects**



Slide from announcement presentation

Project Intake

A QI team leader can register a project through an online form (partial figure below), or by contacting the relevant department staff.

Register New QI Projects Here

Hi, Anesthesia folks!
Do you have a new Quality Improvement idea?
To help us keep track and give due credit, please enter info about it in this form.
Thanks!

Your Project's Title *
Please provide a brief but descriptive title

Where are you in the overall process? *
Almost all projects at this point will be in the planning/drafting stage, but if you're farther along, let us know.

Planning, drafting documents
 Awaiting approvals (e.g. IRB)
 Awaiting retrospective data
 In PDSA cycle
 Stalled
 Maintaining successful intervention
 Concluded: presented + maintaining
 Discarded

Which faculty members are involved? *
Select or enter value

Who is the lead resident on the project? *
Just one name, please; there's another blank for adding more

Select or enter value

Please enter the LEAD resident's cohort

Intern CA1 CA2 CA3 Fellow

Please list any other residents, medical students, or other learners

- Links to the form can be shared on department websites, by QR code, by email, etc.
- The online form allows entry of basic relevant information, as well as upload of a project plan (e.g. PDSA)
- The system can be set to automatically email the coordinator with an alert about the new entry
- The coordinator can then review the project plan and provide advice and resources as appropriate

Engagement

The system allows the creation of reports with live and interactive content. One such report is widely shared on relevant department websites. It includes:

- A live count of active projects and their status
- Contact info for the mentor/ coordinator
- A list of active projects' titles
- Another path to access the project intake form
- Links to relevant resources

Anesthesiology QI Hub

Got a Question?
Contact Tim Petersen:
tmpetersen@salud.unm.edu, or 272-1762

Overview of Projects' Status

36 Active Projects

Current Anesthesiology QI projects

Project Title	Status	Last report
AIC check for surgeries involving hardware implants	Discarded	10/09/20
APS rib fracture blocks and respiratory failure	Discarded	09/10/20
Blood product project: knowledge of mgmt/handling	Maintaining successful intervention	09/10/21
Burnout Survey	Completed: presented + maintaining	04/13/21
Consent for Blood Transfusion in JW Patients	Planning, drafting documents	07/01/20
Cuff Pressure Check of ETts	In PDSA cycle	03/10/21
Decreasing Desflurane usage for Environmental Sustainability	Completed: presented + maintaining	07/02/20
Dental Exam Reporting and Dental Injury Reduction	Discarded	04/13/21
Difficult IV placement requests in L&D	Stalled	04/13/21
Do video visits increase PACU usage?	Awaiting retrospective data	09/10/21
ESP efficacy in Surg Onc patients	In PDSA cycle	07/01/20

Project Name	Research	Overall project status	Progress report	Last contact	Notes: What's the holdup (if any)?	Faculty Member(s)	Lead Resident or Fellow	Lead resident year
Changing Ventilation Modes for Lung Protective Strategy		Discarded		10/09/20				
Safety of Peripheral IVs in LJ		Discarded		09/10/20				CA3
Spinal Cord Stim FAQ sheet update		Maintaining successful intervention		09/10/21	TP sent followup Sep 1			CA3
Tegaderm Placement for BWA		In PDSA cycle		04/13/21	Disappointing results, stopping early and write			CA3
Dropbox Guide for Thoracic Anesthesia		Completed: presented + maintaining		04/13/21	TW says concluded			CA3
Methadone and pediatric spine surgery		Planning, drafting documents		07/01/20	IRB drafted, in revisions			CA3
Burnout Survey		In PDSA cycle		03/10/21	Issued another survey 3/10/21			CA3
Wellness Room assignment timing and break guidelines		Planning, drafting documents		12/14/20	Spilloff from other wellness. Going live			CA3
Reducing Deep Wakes with Propofol Risk-Red Project		Completed: presented + maintaining		07/02/20				CA3
General vs Regional Anesthesia Safety in Wrist Fr Repair		In PDSA cycle		03/01/21	Manuscript to be prep			CA3
Guidelines for perioperative management for patients who are b...		Stalled		04/13/21	CL says transfer			CA3
TKA usage and postoperative complications		Stalled		04/13/21	CL says transfer			CA3
TKA-related complications in spine surgery		Awaiting retrospective data		09/10/21	Data still slow			CA3
Consent for Blood Transfusion in JW Patients		In PDSA cycle		07/01/20				CA3
Optimizing Pediatric Patients for Spine Surgery		In PDSA cycle		08/05/20	are analyzing			CA3
Location & Use of L&D emergency equipment video		In PDSA cycle		03/09/21	Getting nurses involved with training			CA3
Two posters about antithrombotic plan usage		Completed: presented + maintaining		11/23/20				CA3
Reducing case cancellations with EHR checklist		Discarded		04/14/21	steps ahead & for non			CA3
Insolvent Dural Punctures: Tracking affected pts		In PDSA cycle		10/05/20	is pulling data system set up			CA2
Improving accuracy of epidural hypertension/relaxus records		Maintaining successful intervention		01/20/21	emailed dept to describe success			CA2
Reducing hypotension with L&D epidurals		Planning, drafting documents		05/09/21	is adjusting the dosing protocol			CA2
Blood product project: knowledge of mgmt/handling		In PDSA cycle		04/20/21	Issuing questionnaires, making progress			CA2
Reducing anesthetic gases' environmental effects		Completed: presented + maintaining		02/05/20				CA2
AIC check for surgeries involving hardware implants		In PDSA cycle		04/09/21	Gathering data via			CA2
Preop Pathway and Default Anticoagulant Plans		Planning, drafting documents		12/03/20	Just getting started. Had been successful at C			CA2

The system's core spreadsheet (partial)

Reports

Reports can also be created to serve the needs of specific constituents, with controlled access. Examples in use by Anesthesiology include:

- Lists of projects by resident and cohort
- Lists of projects by faculty mentor
- Date of most recent contact
- Department-imposed deadlines
- Residents without an active project
- Projects with impending lead-resident graduation, needing handoff to a junior resident
- Candidate projects for official department metrics
- Projects flagged for extra attention (slow progress, administrative hangups, etc.)

Fine-grained iterative process

- Platform capabilities, user awareness and expectations, and specific details of a given setup interact dynamically
- Regular meetings of the QI management group result in frequent tweaks to meet identified needs
- The core spreadsheet has changed gradually but substantially from its initial configuration, and continues to develop