



University of California  
San Francisco

*advancing health worldwide™*

## School of Medicine

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Department of Medicine*

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Administration  
Department of Medicine*

# Industry Clinical Trials: Budgeting and Expense Management

# The UCSF Experience

- **Industry trials represent 9.8% of awards at UCSF**
- **Clinical trials represent 17% of awards in DOM**
- **129 active clinical trials in the department, of which 90% are industry**

# UCSF Infrastructure

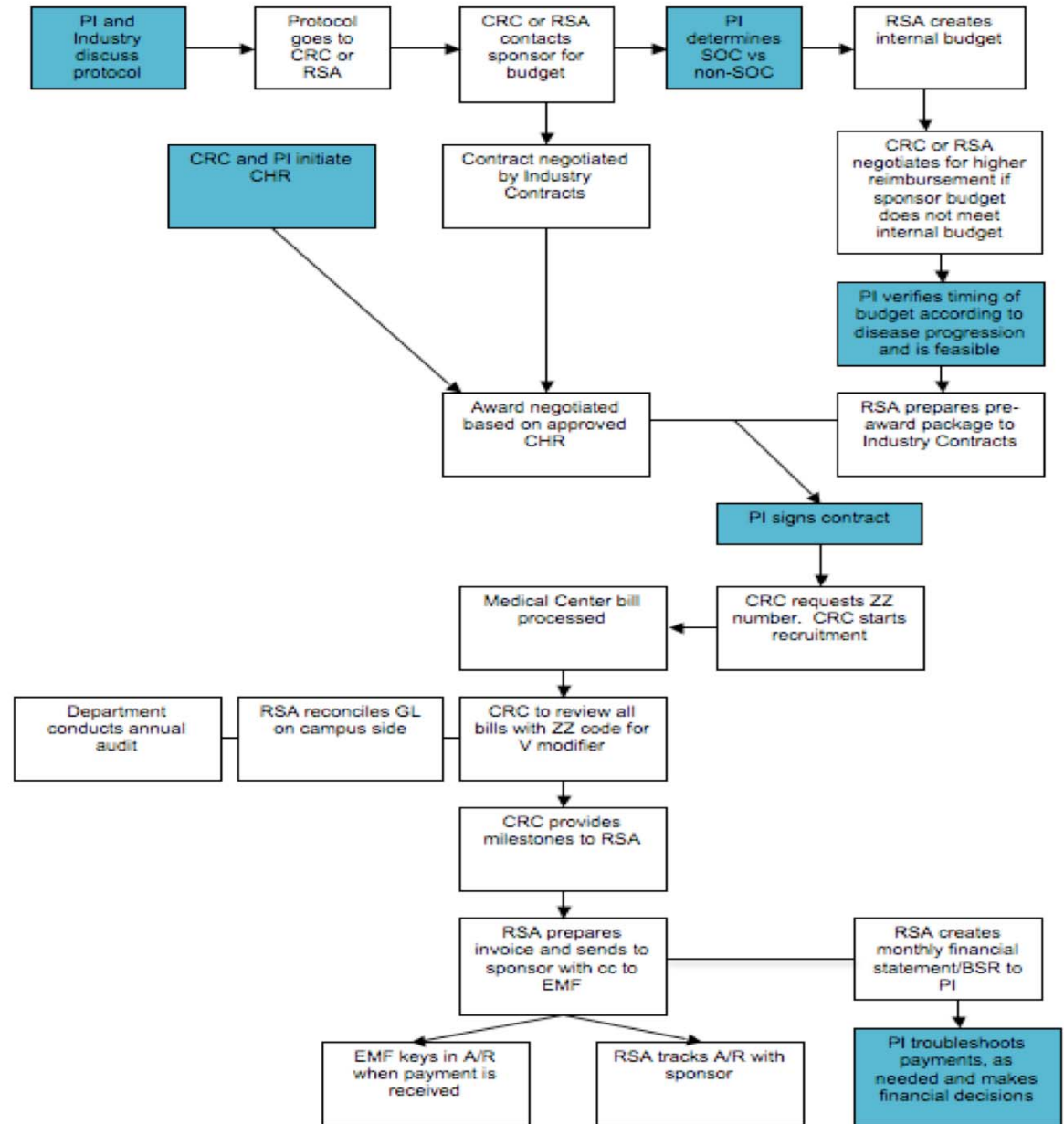
- **Campus and Medical Center: separate entities**
- **CAMPUS:**
  - Industry Contracts
  - Committee on Human Research (UCSF's IRB)
  - Controller's Office
- **MEDICAL CENTER:**
  - Clinical services
  - Patient billing
- **Centralized Clinical Trial Organization (CTO) does not exist**

## Roles of the PI

- **Finalize protocol**
- **Determine standard of care (SOC) vs. non-SOC procedures/services**
- **Review / approve budget**
  - Feasibility (DOM requires  $\geq 3\%$  effort for PI)

## Roles of the PI (cont' d)

- **Regulatory compliance:**
  - Amendments, modifications, renewals, extensions
- **Supervise Clinical Research Coordinator (CRC) activities**
  - Study set-up, including ZZ account
  - Proper assignment of ZZ account, V code, and QV modifier
  - Ensure invoice submission and A/R is tracked by research services analyst (RSA)
  - Campus and medical center ledger reconciliation



# Compliance Policies

- **CMS National Coverage Determination.**

Cannot bill Medicare or Medicaid for procedures or services of the research component of a trial just because CMS considers the components otherwise reimbursable when part of standard of care.

- **NIH Clinicaltrials.gov.**

All new active Phase II to IV clinical trials registered to national database, both NIH and non-NIH funded trials.

- **Enforcement of Federal Anti-Kickback.**

Illegal for sponsors to provide financial incentives for billing CMS for study-related procedures that should be billed to the sponsor.

# Contract vs. Grant

- **GRANT**

- Funds for the conduct of a project
- Delegated authority to spend up to the award amount.
- Award usually paid in full

- **CONTRACT**

- Reimbursement for deliverables, services, and/or milestones achieved.
- Payment contingent upon proof of services delineated in the agreement.
- Rarely get full amount of the budget depending upon accrual and reimbursement schedule



# Example of Contract Reimbursement

	Month 1	Month 2	Month 3	Month 4	Month 5
<i>Expenses</i>					
IRB	\$ 2,000				
RX Set-up	\$ 650				
PI Salary	\$ 16,500	\$ 16,500	\$ 16,500	\$ 16,500	\$ 16,500
CRC Salary	\$ 9,375	\$ 9,375	\$ 9,375	\$ 9,375	\$ 9,375
Regulatory Salary	\$ 10,417	\$ 10,417	\$ 10,417	\$ 10,417	\$ 10,417
Admin Salary	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167
<b>Subtotal</b>	<b>\$ 43,109</b>	<b>\$ 40,459</b>	<b>\$ 40,459</b>	<b>\$ 40,459</b>	<b>\$ 40,459</b>
<i>Revenue</i>					
Visits 1&2	\$4,000	# Pt 10 \$ 40,000	# Pt 8 \$ 32,000	# Pt 7 \$ 28,000	# Pt 9 \$ 36,000
Visit 3	\$1,500			8 \$ 12,000	7 \$ 10,500
Visit 4	\$1,500				
4-monthly f/u visit	\$1,500				
Event/EOT visit	\$2,500				
F/U visit after Event/EOT visit	\$1,500				
EOS visit	\$2,500				
<b>Subtotal</b>	<b>\$ -</b>	<b>\$ 40,000</b>	<b>\$ 32,000</b>	<b>\$ 40,000</b>	<b>\$ 46,500</b>
<b>Balance</b>	<b>\$ (43,109)</b>	<b>\$ (43,109)</b>	<b>\$ (51,568)</b>	<b>\$ (52,027)</b>	<b>\$ (45,986)</b>

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# Example of Contract Reimbursement

*Expenses*

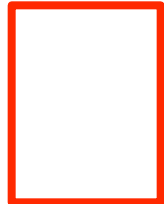
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**Balance**

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# pts



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# Pre-Clinical Trial Agreement

Nothing ventured, nothing gained

- **Demonstrates good faith on part of sponsor**
- **Provides reimbursement for the time to establish and negotiate the protocol and/or contract**
  - PI input
  - Staff efforts
- **Insurance should the study not go forward**
  - Sponsor reneges
  - Contractual language problematic
  - Disagreement over budget

## **Start-Up Costs:**

Sponsors expect to be asked

- **Reimbursement to initiate start-up of trial that must otherwise be covered by discretionary funds or pro-fees**
- **IRB, pharmacy set-up, PI and staff personnel costs, supplies, etc.**
- **Documentation of costs should begin as soon as the Confidentiality Agreement is received.**

### **RAMIFICATIONS IF NONE NEGOTIATED:**

- **Absence of start-up costs results in a deficit balance for the life of the study.**
- **Deficit balances incur negative interest.**

# Internal vs. Sponsor Budget

- **SPONSOR BUDGET**

- May show which services they will pay for to derive the per patient reimbursement
- May or may not accurately reflect the SOC and study services defined by the PI and protocol.

- **INTERNAL BUDGET**

- Delineates all expenses (non-SOC) and items to be invoiced
- Must be negotiated, particularly since the medical center expects to (and will be) paid

- **Discrepancy requires re-negotiation or YOU CAN REFUSE TO DO THE STUDY.**

# Developing the Internal Budget

- 1. Review the protocol.**
- 2. PI determines which / when procedures are SOC**
- 3. PI dictates which and when are procedures non-SOC**
- 4. Medical Center research rate for each non-SOC procedure identified**
- 5. RSA details all expenses (salary, IRB fees, supplies, clinical costs, etc. )**
- 6. PI review**
  - Are milestones realistic given nature of disease?
  - Is accrual over-estimated?



# Standard of Care: The Balance

- **Reasonable assessment of normal care for a patient receiving treatment**
  - Standard management
  - Accepted imaging and laboratory parameters
- **Possible research-specific procedures v. SOC**
  - Frequency of tests, visits
    - EKG' s, MUGA' s, etc...
- **Research-specific costs**
  - Investigational agent
  - Special or extra imaging
  - Pharmacokinetics or other unique lab tests

# Milestones / Accrual

- **MILESTONES**

- Benchmarks match the likely course of disease
  - e.g. realistic life expectancy, clinical outcomes
- Minimize ability of sponsor to control milestones
  - Payable upon study closure vs. completion of CRF
  - Payable at accrual or treatment initiation

- **ACCRUAL**

- Reimbursement for “screen failures”
- Under rather than over-estimate patient numbers
  - Costs distributed per patient:
    - Overestimate accrual = costs not covered
    - Underestimate accrual = possible margin

# Directs vs. F&A: “hidden costs”

- **DIRECTS**
  - Dollars that go towards the personnel and supplies for conduct of the science
- **F&A**
  - Overhead cost (charge) to the University
- **UCSF F&A negotiated rate for Industry-sponsored trials is 26% and 33% for industry-sponsored with subcontracts.**
  - THESE ARE VERY COMPETITIVE RATES!!
- **Need to add F&A to budget negotiation**

# F&A Example

- **Internal budget**
  - \$267,000 for direct costs
  - \$69,420 additional in F&A ( $\$267,000 \times .26$ )
  - Total budget is \$336,420.
- **Sponsor reimbursement = \$3,150 per patient**
  - PI estimates accrual of 100.
  - $\$315,000 \div 1.26 = \$250,000$  in directs
  - \$65,000 in F&A
  - PI actually gets \$2,500 per patient.

# Clinical Trial Risks

- **Underbudgeting will result in deficit regardless of recruitment.**
- **Important to distinguish SOC from non-SOC procedures at the time of protocol and budget development**
  - Facilitates correct billing
  - Facilitates correct language for patient financial responsibility in consent forms and other regulatory documents
  - Decreases exposure for audit

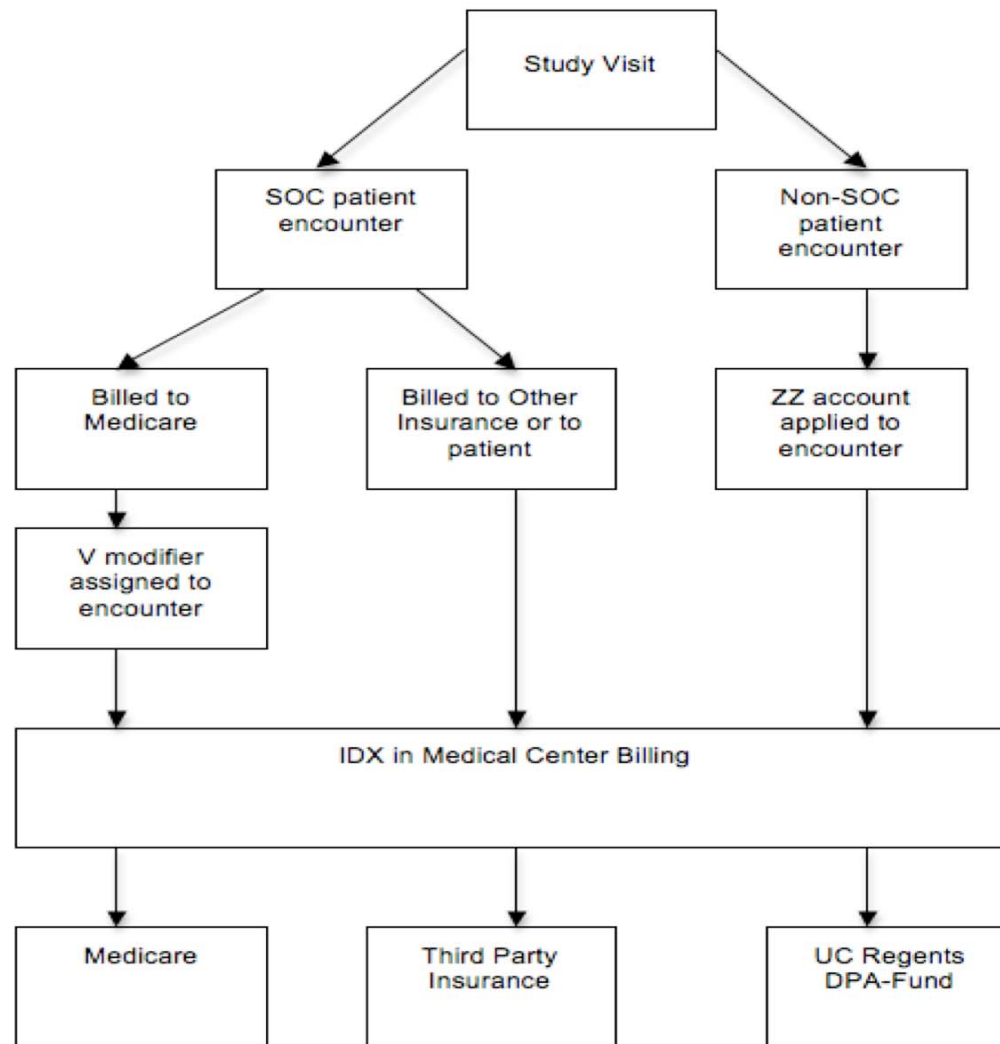
# Post-Award Management

- **Delineation of SOC vs. Non-SOC is used by CRC to correctly bill.**
- **Separate encounter forms at each visit, as appropriate.**
- **CRC must include V code and QV modifier for all SOC study procedures billed to Medicare.**

# Compassionate Use Protocols

- **Agent provided free of charge**
- **All other components of care either SOC or unreimbursed**
- **Regulatory expectations similar to clinical trial in terms of reporting, etc..**
- **Compassionate use = clinical trial if > 1 patient treated (without funding)**

# Flow of ZZ Account





# Challenges at UCSF

- **Electronic medical record system does not exist**
- **Centralized database of study subjects does not exist**
- **Decentralized invoicing**
- **Decentralized tracking of A/R**
- **Manual system of reconciliation**
- **Reimbursement lag on expenses**
- **Negative interest**

# Recent Progress and Achievements

- **Implementation of iMedRIS for IRB review, approval, and document management**
- **Newly appointed Assistant Vice Chancellor of Research (was the Director of Industry Contracts)**
- **Portion of Medical Center charge master interfaces with OnCore**
- **Clinical trials infrastructure is major component of the Campus' recently completed Research Administration Systems Strategic Plan**

# Resources

- **Department of Medicine**

- Suzanne Sutton, [ssutton@medicine.ucsf.edu](mailto:ssutton@medicine.ucsf.edu) (415) 502-4896
- Beth Davis, [bdavis@medicine.ucsf.edu](mailto:bdavis@medicine.ucsf.edu) (415) 502-3176
- Joseph Wilson, [jwilson@medicine.ucsf.edu](mailto:jwilson@medicine.ucsf.edu) (415) 514-1120

- **Industry Contracts, Office of Sponsored Research**

- Jim Kiriakis, [jim.kiriakis@ucsf.edu](mailto:jim.kiriakis@ucsf.edu) (415) 353-4452
- Irene Shin, JD, [irene.shin@ucsf.edu](mailto:irene.shin@ucsf.edu) (415) 514-8920
- Sophia Chang, JD, [sophia.chang@ucsf.edu](mailto:sophia.chang@ucsf.edu) (415) 514-6204
- Kent Iwamiya , [kent.iwamiya@ucsf.edu](mailto:kent.iwamiya@ucsf.edu) (415) 353-4445
- Mora Mattingly, [mora.mattingly@ucsf.edu](mailto:mora.mattingly@ucsf.edu) (415) 353-4695
- Brenda Hefti, PhD, JD, [brenda.hefti@ucsf.edu](mailto:brenda.hefti@ucsf.edu) (415) 514-8074
- Susan Shih, PhD, [susan.shih@ucsf.edu](mailto:susan.shih@ucsf.edu) (415) 514-8985

## Resources (continued)

- **Committee on Human Research**

- John Heldens, john.heldens@ucsf.edu (415) 476-9840
- Richard M. Wagner, richard.wagner@ucsf.edu (415) 476-117
- Lisa Denney, lisa.denney@ucsf.edu (415) 514-2152
- Michael Thomas, michael.thomas@ucsf.edu (415) 476-9837

- **Medical Center Billing**

- Tim Arnold, tim.arnold@ucsfmedctr.org (415) 353-3885
- Derek Howes, derek.howes@ucsfmedctr.org (415) 353-3716
- Liza Shapiro, (415) 353-7617 (ZZ number)